

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1880.—Vol. XLI.

LONDON, SATURDAY, SEPTEMBER 2, 1871.

(SUPPLEMENT) {PRICE FIVEPENCE.
PER ANNUM, BY POST, £1 4s

MR. JAMES CROFTS, STOCK AND SHAREBROKER, No. 1, FINCH LANE, CORNHILL. (ESTABLISHED 1842.)

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

SPECIAL BUSINESS IN GREAT ROYALTON, ROCHE CONSOLS, CASTLE AN DINAS.—The first named has much improved this week. Mr. CROFTS strongly recommends these three promising tin mines.
Every description of shares bought and sold at NET prices.
Bankers: Metropolitan Bank.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER, 44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

150 Anglo-Austral, fully paid, warrants to bearer, 17s. 6d.	5 Eberhardt, £39 7/8.	50 Rhydallog, fully pd., £2.
25 Almada.	5 East Lovell, £13 3/4.	15 Roman Grav., £18 3/4.
10 Asbestos, £5 1/2.	10 East Van, £13 3s. 9d.	30 Westland Crk., £4 3/4.
50 Bog, £2 1/2.	15 East Grenville.	75 So. Rom. Grav., 25s. 9
15 Bradford, £2 1/2.	70 E. Llangynog, £2 7s 6	25 So. Aurora, £4 1s. 3d.
10 Blain Caelan.	20 Frank Mills.	50 So. Condurow, £3 1/2.
3 Birdseye Cr., £ 1/2 pm.	60 Frontino, 6s. 3d.	3 St. John del Rey, £31 1/2
50 Chontales, fully paid, 26s. 9d.	10 Great Laxey, £17.	5 Taqaaril, 7s.
2 Carn Brea, £140.	5 Great Vor, £9 18s. 9d.	15 Tankerville, £17 3s. 9
50 Caegynon, £6s. 3d.	30 Marke Valley, £5 18s 9	25 Utah, £15 1/4.
50 Drake Walls, 16s. 9d.	20 North Treskerby.	50 Van Consols.
20 Don Pedro, £3 13 pm.	50 Pennerley, £4 3s. 9d.	5 West Chiverton, £21.
15 East Caradon, £5 2s 6	45 Perkins Beach, 30s.	30 West Tankerville.
100 Eclipses, 20s.	60 Plynlimmon, 37s. 6d.	50 West Maria, 20s.
	20 Pacific, £5 8s. 9d.	70 Yudanamutana, 16s 3
	50 Prince of Wales, 18s 9	
	25 Parys Mountain.	

W. H. B. transacts business in every description of shares at the best market prices, and free of commission.
Bankers: National Provincial Bank of England, E.C.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER, 11, ROYAL EXCHANGE, E.C. Bankers: Bank of England.

MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROMGORTON STREET, LONDON, E.C. Every description of shares BOUGHT AND SOLD at the best market prices.

MR. C. POWELL, STOCK AND SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C.

MR. THOMAS SPARGO, MINING ENGINEER, STOCK AND SHAREDEALER, 224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

WHEAL GRENVILLE, EAST WHEAL GRENVILLE,
Treleigh Wood, West Caradon, Wheal Lucy, New Rosewarne, and Wheal
Crobri Mines specially recommended. Wheal Grenville shares, in all proba-
bility, will be worth £20 each; East Grenville, £10; Treleigh Woods, £150;
West Caradon, £7; Wheal Lucy, £20; New Rosewarne, £150; and Wheal
Crobri, £5.
Mr. JOHN RISLEY (SWORN) STOCK AND SHARE BROKER,
77, CORNHILL, LONDON, E.C.

MR. THOMAS THOMPSON, JUN., STOCK AND SHAREDEALER AND MINE AGENT, 5, WHITEHALL, LONDON, S.W.

Some valuable hints as to the purchase of mining shares will be found in Mr.
THOMPSON'S "Investment Circular" for September; now ready; post free,
price 6d.

MR. JOHN CARTER, MINE AND SHARE DEALER, CAMBORNE, CORNWALL (Son of the late Thos. Carter), transacts business in every description of shares at close market prices of the day. References exchanged when required.

Twenty-six Years' Experience. MR. F. W. MANSELL, STOCK AND SHAREDEALER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C. Daily List of closing prices in British and Foreign mining even (free). References exchanged. Bankers: London Joint-Stock Bank.

MESSRS. WM. MARLBOROUGH AND CO.,
29, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established
17 years), have FOR SALE the FOLLOWING SHARES at prices annexed:—
60 Aberdaunt, 20 Frank Mills, 21s. 6d.
60 Almada, 20s. 6d.
60 Alvaraz, £ 1/2 pm.
60 Bog, £2 1/2.
60 Birdseye Creek, £4 1s.
2 Carn Brea, £120.
3 Cook & Kitchen, £27 6s
50 Caegynon, £1 1/2.
1 Devon Consols, £101.
20 Don Pedro, £3 prem.
40 Drake Walls, 13s. 9d.
50 East Terras.
5 Eberhardt, £40 1/4.
10 East Van, £13 3/4.
10 East Rhydallog, £1 1/2.
10 East Lovell, £14 1/4.
100 Eclipses, 2s. 6d.
50 East Pool, £13 8s. 9d.
50 East Llangynog.
25 E. Grenville, £10 1/4.
25 E. Llangynog.—A special report will be forwarded upon the receipt of 5s.

20 Frank Mills, 21s. 6d.	50 Llanarmon, 25s.	30 Westland Crk., £4 3/4.
40 Great Retailack.	15 South Aurora, £4 1s. 3d.	10 So. Condurow, £3 1/2.
10 Great Vor, £9 18s. 9d.	20 Sweetland, £4 1/2.	30 South Crofty, £21 1/2.
2 North Roskear, £17 3/4.	10 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
30 Gwydyr Park, 14s. 6d.	10 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
20 Gt. St. Chiverton, 2s 9	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
50 Lovell Consols, 2s. 3d.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
20 New Hingston.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
20 New Lovell, 41s.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
10 Pacific, £5 8s. 9d.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
25 North Pool, £3.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
30 North Crofty, £2 1/2.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
10 Pinto, £1 pm.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
50 Prince of Wales, 17s 9	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
20 Pennerley, £4 1s. 3d.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
50 Parys Mount, £3 2s.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
25 Perkins Beach, £1 1/2.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
30 Powell United.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
30 Rhydallog.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
5 Roman Grav., £10 1/4.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6
50 Utah, £15.	5 So. Condurow, £3 1/2.	5 So. Rom. Grav., £2 7s 6

WHAT PAYS BEST?—A PRACTICAL TREATISE UPON INVESTMENTS IN BRITISH AND FOREIGN MINES. W. MARLBOROUGH AND CO., 29, Bishopsgate-street Within, London. Post free Sixpence.

MR. HENRY MANSELL, STOCK AND SHAREDEALER, 24, GREAT WINCHESTER STREET, LONDON, E.C.

AN OFFER WANTED for the following shares (or any part of same):—
10 Great Vor, £10 2s. 6d.
50 Llanarmon, £2 7s. 6d.
10 Roman Grav., £18 1/2
10 So. Herodfoot, offer wanted.
20 Taqaaril, 7s.
50 East Terras, 20s.
3 Cook & Kitchen, £27 18s
50 Rhydallog, £1 1/2.
5 Eberhardt, £40 5s.
40 Terras Tin.
40 W. Tankerv., £3 13s 6
50 Great Lovell.
20 East Grenville.
EAST LLANGYNOG LEAD MINING COMPANY (Limited).—Mr. HENRY MANSELL strongly recommends the purchase of these shares. A detailed report on application; and specimens of the ore just brought from the mine can be seen at the above address.
Daily List of Latest Prices sent free on application.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—

3 Devon Great Consols, 3 Miners, 25 Polbrean, 120 St. Agnes Consols, 150 West Caradon, 25 North Crofty, 125 East Terras, 200 Perkins Beach, 180 Gwydyr Park, 180 Wheal Lucy, 25 Trevarrack, 160 West Tankerville, 15 East Caradon, 20 Har- mony and Montague, 60 Prince of Wales, 110 Wheal Crobri, 50 Willoughby, 50 Plynlimmon, 20 Bog, 180 Old Batholes, 10 South Condurow, 55 Caegynon, 5 Pro- vidence, 25 New Lovell, 10 East Grenville, 10 Marke Valley, 15 Great Vor, 60 West Maria, 20 Wheal Grenville, 60 Chiverton Valley, 30 Frank Mills, 20 Rose and Chiverton, 200 Vron United, 3 Cook & Kitchen, 50 Alameda, 200 Anglo-Brazilian, 20 Birdseye Creek, 200 Sao Vicente, 250 Rossa Grande, 20 Eberhardt, 25 Sierra Botas.	20 Tankerville, £17 8s.	70 Gwydyr Park, 18s.
	100 Bog, £2 17s. 6d.	75 Wreul Uoy, £8 7s. 6d
	20 Sweetland Creek.	20 Sweetland Creek.
	50 King.	wanted.
	50 Queen.	30 North Crofty.
	50 Virtuous Lady.	50 East Llangynog.
	5 W. Chiverton, £20 1/2.	10 Utah, £5 1/2 pm.
	75 Eclipses.	50 West Jewell.
	30 Bustard Copper, £8 1/2	20 Pennerley, £4 3s. 6d.
	fully paid.	60 East Rhydallog.
	30 Aberdaunt.	50 Wheal Crobri.
	65 Perkins Beach.	70 Drake Walls.
	60 New Beldon.	20 East Caradon, £5 4s.
	30 Wheal Grenville.	20 So. Roman Gravels.

SPECIAL BUSINESS in St. John del Rey, Poldice, Van, Miners, New Pem- broke, Wheal Jane, East Darren, and Bwch Consols.

THE STOCK AND SHARE MARKET.—

Notwithstanding the holidays, there has been of late great activity in the Stock and Share Markets, and a considerable rise in most of the stocks and shares has taken place. The markets still continue very firm, with an upward tendency. The harvest is being got in rapidly, and promises to be a very abundant one; the Money Market is easy, and trade expanding to a surprising degree.
The position of the Mining Market at present is, that there is much less doing in foreign gold mines, &c., and much more actual business doing in Cornish, Shropshire, and Welsh Mines. The leading tin, lead, and copper mines are those to which investors and speculators ought to direct their attention, for there is no class of security which offers so good a chance of success as mining, when judiciously gone into. As regards the foreign gold schemes and com- panies, too much caution cannot be exercised, as has been recently so fully pointed out in the columns of the "Times."

DIVIDENDS ON STOCKS AND SHARES.

During the next few weeks the half-yearly dividends will be paid on the funds, banks, railways, and other descriptions of stocks and shares, and, no doubt, a fair proportion of the capital thus liberated will be reinvested in mining shares. The result of this will naturally be to advance the value of the particular mining shares that may be purchased; so that those who at once effect their purchases, will, in all probability, do so at much more moderate prices than those who defer the operation. The present may be considered one of the most favourable opportunities that has presented itself for many years past for securing shares in sound dividend and progressive mines at prices far below their actual value.

From P. WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 650, for Friday, Sept. 1, 1871. Price 6d. each copy, forwarded on application.

MR. PETER WATSON, STOCK AND SHAREDEALER, 79, OLD BROAD STREET, LONDON, E.C.

Bankers: The Alliance Bank, and Union Bank of London.

WEEKLY MINING CIRCULAR, EVERY FRIDAY.— LONDON DAILY RECORD, STOCK & SHARE LIST, Every Evening. Published by P. WATSON, Stock and Sharedealer, 79, Old Broad-street, E.C.

MR. W. H. CUELLO, No. 42, CORNHILL, LONDON, E.C. Daily price-list on application.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

Ninth Edition; post free for seven stamps.
HOW TO INVEST, AND WHAT TO SELECT:
THE CAPITALIST'S GUIDE.
Published by E. J. BARTLETT, 30, Great St. Helen's, London, E.C.

MESSRS. W. DUNN AND CO., STOCK AND SHARE- DEALERS, 3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C. Bankers: National Provincial Bank of England.

FOR SALE, at prices affixed:—
10 Asbestos, £4 2s. 6d.
25 Bog, £2 1/4.
50 Caegynon, £1 10s.
2 Carn Brea, £132.
4 East Basset, £2.
5 E. Lovell, ex div, £14 1/4.
5 East Van, £13 2s. 6d.
10 Hingston Down, £2 15
20 North Crofty, £2 2s
5 No. Roskear, £17 1/2.
25 Pennerley, £3 16s.
10 S. Condurow, £9 16s
100 Van Consols, £1 10s.
3 West Frances, £60 5s.
10 Wh. Grenville, £6 15s
15 Wheal Lucy, £3 7s 6d
5 Wh. Margaret, £17.
2 Wh. Mary Ann, £5 15
10 Wheal Ury, £8 15s.

Having visited many of the Lead Mines of Wales and Tin Mines of Cornwall, Messrs. W. DUNN and Co. have acquired information of sufficient importance to induce them to undertake the responsibility of advising their customers as to what shares may be bought with almost a certainty of large profit. There is now a most favourable opportunity for purchasing the shares Messrs. W. Dunn and Co. have in view, particulars of which can be obtained personally or by letter. To parties wishing to invest a small amount—say, from £50 to £500—Messrs. W. D. and Co.'s selections would particularly apply, as they would, by purchasing the kind of shares, have the prospect of an early and great rise in price, and by a corresponding outlay in another kind, derive dividends equivalent to 27 per cent. on the whole of the amount employed.

EDWARD BREWIS AND CO., 18 AND 19, BISHOPSGATE STREET WITHIN, CITY, LONDON, E.C. Bankers: Alliance Bank (Limited), Bartholomew-lane, E.C.

MR. JAMES STOCKER, STOCK AND SHAREDEALER, 2, CROWN COURT, THREADNEEDLE STREET. Bankers: London and Westminster (Established Twenty Years).

SILK AND CO., STOCK AND SHARE BROKERS, 32, REGENT STREET, PICCADILLY, W. FRANK LIMMER, Secretary.

There are many mines now offered to the public, but none with such chances of success to be purchased at so low a figure as the NEW HENDRA TIN MINE shares, and with so little risk. An inspection of the property freely granted.
Daily Price-List on application.

MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., is PREPARED TO DEAL in all descriptions of STOCKS AND SHARES at close market prices. W. T. strongly recommends for investment the shares of the ECLIPSE GOLD MINING COMPANY, which will soon be in a condition to make large returns of gold and silver. W. T. also recommends the purchase of shares at once in NEW WHEAL LOTTE TIN AND COPPER MINE COMPANY (Limited), St. Agnes, Cornwall, full particulars of which can be had on application. Bankers: Imperial Bank.

MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C. BUYERS of Eberhardt, South Aurora, Utah, Richmond Consolidated, &c. FOR SALE—1 Carn Brea, £137 1/4; 20 South Condurow, £9 1/2; 10 East Lovell, £14; 10 Great Vor, £9 1/4; 10 East Van, £13 3/4; 20 Pacific; 50 Birdseye Creek; 10 Grenville, £7 1/4; 30 South Aurora, £4 1/4; 50 Taqaaril, 6s. Bankers: The London Joint-Stock Bank.

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON, E.C. All marketable stocks dealt in for cash or account. We strongly advise the prompt purchase of shares in the EAST LLANGYNOG LEAD MINING COMPANY (Limited). This mine will shortly pay a dividend. Apply at once, as above.

MESSRS. HITCHENS AND CO., NEW POULTRY CHAMBERS, LONDON, E.C., MINERAL AGENTS AND SURVEYORS.

Capt. S. EDDY MARTIN, Mining Engineer and Surveyor, and for many years
connected with the celebrated Lisburne Mines, Cardiganshire, and now re-
siding in Montgomeryshire, is one of the above firm. His services can be
obtained to survey, inspect, and report on mining properties in the Principality,
and, from his long connection with Welsh mining, investors should avail them-
selves of his services, which would guide them to safe and sure investments.
All communications to be addressed as above, to which prompt attention will
be given.
HITCHENS and Co., from personal inspection, can name three mines on which
a great rise must take place on their merits.
H. and Co. can also name a commercial undertaking that will pay from 15 to
20 per cent., the same being a safe investment.

THE LONDON STOCK AND SHARE AGENCY, 165, STRAND, LONDON. Stock Brokers and Dealers in all descriptions of British and Foreign Stocks and Shares, British and Foreign Mines, and Miscellaneous shares, &c. The Agency specially recommends Pedn-an-drea Mine, Castle an Dinas, Castle- gate, and St. Austell Iron Mine. Large profits may be made from each.

MR. CHARLES THOMAS, MINING AGENT, 3, GREAT ST. HELEN'S, LONDON, E.C.

MESSRS. A. W. THOMAS AND CO., 10, COLEMAN STREET, E.C., MINING AGENTS, AND STOCK AND SHAREDEALERS. Monthly Circular for September now ready; post free, 6d.

MESSRS. G. LAVINGTON AND A. PENNINGTON,
44, THREADNEEDLE STREET, E.C., STOCK AND SHAREDEALERS,
have SPECIAL BUSINESS in the undermentioned:—
Birdseye. Kity (St. Agnes). Pacific Gold.
Bog. Mary Ann. Sweetland Creek.
Eberhardt. Powell United. South Aurora.
Eclipses. Pennerley. Utah.
Great Wheal Vor. Perkins Beach. West Esgair Lie.
Parties wishing to purchase or sell in the foregoing are requested to make
early application.
WANTED—100 Pacific.
LAVINGTON AND PENNINGTON, SWORN BROKERS.

TO INVESTORS.—NOW READY. LAVINGTON AND PENNINGTON'S "MONTHLY RECORD OF INVESTMENTS," containing an exhaustive Review of the British and Foreign Stock and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually. G. LAVINGTON and A. PENNINGTON, 44, Threadneedle-street, London, E.C.

MR. T. E. W. THOMAS, STOCK AND SHAREDEALER, 3, GREAT WINCHESTER STREET BUILDINGS, E.C. Business operations in Mining Shares negotiated at close market rates. Daily Price-List on application. Established 1857.

S O U T H C O N D U R R O W .—
WHY I ADVISED THE SALE OF SHARES IN THIS MINE.
1.—On June 14, one day before the meeting, I learned that the losses on the
four months' working amounted to £234 7s. 8d.
2.—That by an unprecedented course the sum of £878 4s., realised on the sale
of tin on the 14th June, a telegram as to which arrived on the 15th (the morn-
ing of the meeting), was at once discounted, and made applicable to dividend.
3.—That the working costs being over £2000 per month, the margin of pos-
sible profits is not such as to encourage me in recommending the shares as an
investment.
JOHN R. PIKE,
Crown Chambers, Threadneedle-street, London.

MR. T. A. MUNDY, STOCK AND SHAREBROKER, 38, BISHOPSGATE STREET WITHIN, E.C. Bankers: City Bank.

MR. C. A. POWELL, STOCK AND SHAREDEALER, No. 1, PINNER'S COURT, OLD BROAD STREET, E.C. References exchanged. Bankers: City Bank, Finch-lane.

BARTLETT AND CHAPMAN, STOCK AND SHARE DEALERS, 26, CORNHILL, LONDON, E.C. "Handybook for Investors," price 19s. 6d., post free. "British Mines and Mining," price 2s. 6d., post free.

HOODE AND CO., STOCK AND SHAREDEALERS, LIFE, FIRE, AND MARINE INSURANCE AGENTS, 9, UNION COURT, OLD BROAD STREET. Our Circular for August is now ready, and contains a list of mining and other investments of an unusually promising character. Intending investors should apply for a copy before parting with their money. Price 6d., free to clients. At the rate of One Guinea per annum, we give investors information on legiti- mate mining properties in the United Kingdom.

IMPORTANT TO INVESTORS IN BRITISH AND FOREIGN MINES, RAILWAY STOCKS, and other Securities of all descriptions. Dividends at the rate of 5, 10, and 15 per cent. Consult Mr. JOHN B. REYNOLDS' SPECIAL LIST OF INVESTMENTS. Sent free by post on application to JOHN B. REYNOLDS, Stock and Share Dealer, 70 and 71, Bishopsgate-street Within, London, E.C.

THE CITY EXCHANGE MINING AND INVESTMENT OFFICES, 32, NEW BROAD STREET, LONDON, E.C. Business transacted in all marketable securities for cash or account.

INVESTORS IN SEARCH OF GOOD SOUND PROPERTIES, paying 10 to 20 per cent. per annum, should send for the Sixth Edition of "BRITAIN'S METAL MINES," price 1s., or free per post 1s. 1d. A complete Guide to their Laws, Usages, Localities, Statistics, and Share Market. By JOHN R. PIKE, Crown-chambers, Threadneedle-street, London.

MESSRS. CAMERON AND CO., SHAREBROKERS, CHESTER, having a thorough knowledge of the Lead Mining Districts in Wales, are ENABLED TO FURNISH THE BEST AND MOST RELIABLE INFORMATION on all WELSH LEAD MINES. Messrs. CAMERON and Co. invite subscriptions for a limited number of fully- paid shares, at £2 each, in a new MINING PROPERTY, which is certain to pay large dividends at an early date. Full particulars for forwarded on ap- plication. Business transacted in American Gold and Silver Mines, also in Roman Gravels, Tankerville, Bog, Pennerley, and Perkins Beach. OFFICES: BRIDGE STREET CHAMBERS, CHESTER.

HERMANN BREITHAUP, MOUNTAIN ENGINEER, in FREIBERG (SAXONY) attends to the SALE (on Commission) of GOLD, SILVER, COPPER, and other METALLIC ORES and REFUSE at the highest rates, and furnishes information relating thereto post paid on pre-paid application.

CHARLES HALLAS AND CO., SHARE BROKERS, 18, NORTH JOHN STREET, LIVERPOOL. TRANSACT BUSINESS in all the MARKET MINES in WALES, CORNWALL &c. Mines inspected and reported upon by experienced surveyors.

MR. T. W. GREENFIELD, CHURCH LANE, TAVISTOCK. PUBLIC ACCOUNTANT, AUDITOR, STOCK AND SHARE BROKER. Sales and Purchases effected in British and Foreign Stocks, Funds, Railway Debentures and Preference Stock, Bank, Gas, and Mining Shares. FURZE HILL TIN MINE specially recommended.

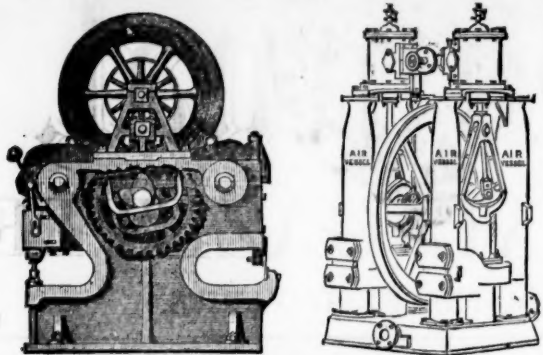
MESSRS. W. BRUNTON AND CO., SAFETY FUSE MANUFACTURERS. REDRUTH, CORNWALL; AND BRYMBO, NEAR WREXHAM.

MR. R. PERCY ROBERTS, FINANCIAL AGENT, 60, ENGLISH STREET, CARLISLE.

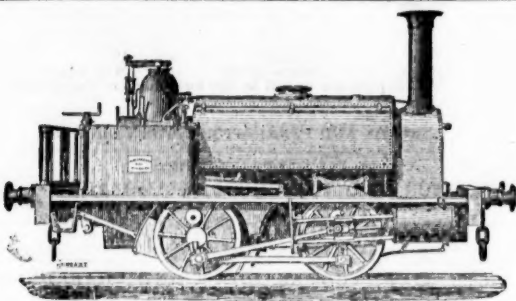
THE LONDON AND PROVINCIAL INVESTORS' SHARE EXCHANGE (POWELL, DIXON, AND CO.), 26, CHANGE ALLEY, LOMBARD STREET, LONDON, E.C., BUY and SELL every description of Stocks and Shares at close market prices net. Exclusive and reliable information on all the market mines.

No. III. SERIES. AUSTRALIAN AND NEW ZEALAND DIVIDEND GOLD MINES INVESTMENT COMPANY (LIMITED).

Capital, £50,000, in shares of £1 each,
In Ten Distinct Series of Investments of £5000 each.
The number of shares applied for in the No. 1 and No. 2 Series having been
considerably in excess of the 10,000 shares to allot, the directors have decided
upon issuing a Third Series forthwith.
The present issue will consist of No. 3 Series, for both Australian and New
Zealand Investments, £5000.
Applications for these shares should be sent in forthwith.
For forms, &c., apply to—
THOMAS DICKER, Secretary.
Offices, 4, Royal Exchange-avenue, London, E.C., Sept. 1, 1871.

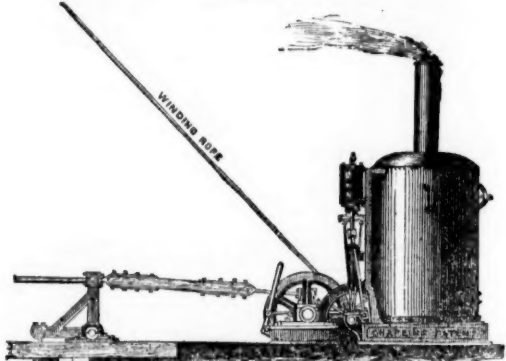


JOHN CAMERON,
MAKER OF
STEAM PUMPS, PORTABLE ENGINES, PLATE BENDING ROLLERS
BAR AND ANGLE IRON SHEARS, PUNCHING AND SHEARING
MACHINES, PATENTEE OF THE DOUBLE CAM LEVER
PUNCHING MACHINE, BAR SHEARS, AND RAIL
PUNCHING MACHINES,
EGERTON STREET IRON WORKS,
HULME, MANCHESTER.



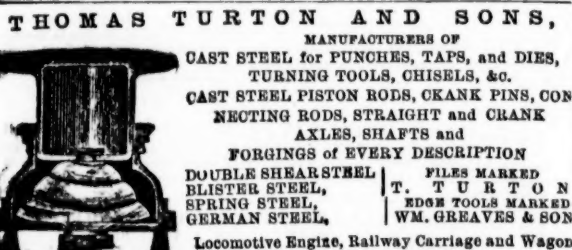
TANK LOCOMOTIVES,
FOR SALE OR HIRE.
HENRY HUGHES AND CO,
LOUGHBOROUGH.

Prize Medal—International Exhibition, 1862.



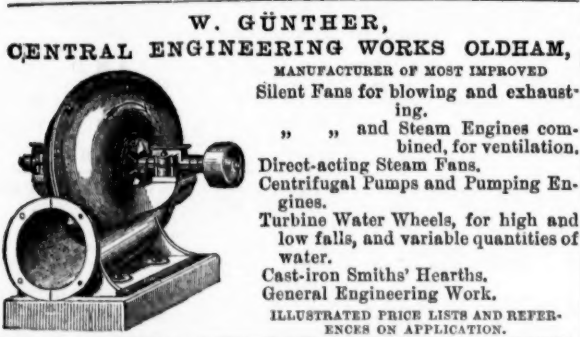
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PORTABLE STEAM ENGINE
FOR PUMPING AND WINDING.
SPECIALLY ADAPTED FOR PITS, QUARRIES, &c.
SIMPLE AND STRONG; require NO FOUNDATION
OR CHIMNEY STACK, and are
EASILY ERECTED OR REMOVED.
Sizes, from 2 to 30-horse power.
Stationary Engines, 1 to 30-horse power, with or
without gearing.
Steam Cranes, 30 cwt. to 20 tons, for wharf or rail.
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or without jib.
Contractors' Locomotives, 6 to 27-horse power.
Traction Engines, 6 to 27-horse power.
Ships' Engines, for winding, cooking, and distilling,
passed by H.M. Government for half water.
Steam Winches. Engines and Boilers for
light screw and paddle steamers.

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MANUFACTURERS OF
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NECTING RODS, STRAIGHT AND CRANK
AXLES, SHAFTS and
FORGINGS OF EVERY DESCRIPTION
DOUBLE SHEARSTEEL FILES MARKED
BLISTER STEEL, T. TURTON
SPRING STEEL, EDGE TOOLS MARKED
GERMAN STEEL, WM. GEEVES & SON
Locomotive Engine, Railway Carriage and Wagon
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CENTRAL ENGINEERING WORKS OLDHAM,
MANUFACTURER OF MOST IMPROVED
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" " and Steam Engines com-
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Centrifugal Pumps and Pumping En-
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Turbine Water Wheels, for high and
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water.
Cast-iron Smiths' Hearths.
General Engineering Work.
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The IRON AND COAL TRADES' REVIEW is extensively circulated amongst the
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and coal districts. It is, therefore, one of the leading organs for advertising
every description of Iron Manufactures, Machinery, New Inventions, and all
matters relating to the Iron, Coal, Hardware, Engineering, and Metal Trades
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For STATIONARY and MARINE ENGINES, has the following advantages:—
SAFETY; NO RISK from DANGEROUS EXPLOSION; **HIGH-PRESSURE STEAM**, with **ECONOMY OF FUEL**; Perfect
circulation, and ready means of removing sediment.
Saving of cost and time in repairs; portability, and, for export, great saving in freight.

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FOR MAIN LINE TRAFFIC, SHORT LINES, COLLIERIES,
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superior specification, equal to their first-class Railway Engines, and specially
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THE SANDYCROFT FOUNDRY AND ENGINE WORKS
COMPANY (LIMITED).
Are now MANUFACTURING CRUSHER ROLLS OF PECULIARLY HARD
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QUANTITY, and to any PATTERN REQUIRED.

Prices and particulars of the above, and of every description of Mining En-
gines, Boilers, Forgings, Pitwork, Water Wheels, Crushing, Dressing, and Amal-
gamating Machinery, and Mining Tools of all kinds, &c., &c., may be obtained
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ROSKEAR, CAMBORNE, CORNWALL.

BLASTING FUSE FOR MINING AND ENGINEERING

PURPOSES,

Suitable for wet or dry ground, and effective in Tropical or Polar Climates.

W. BENNETTS, having had many years' experience as chief engineer with
Messrs. Bickford, Smith, and Co., is now enabled to offer Fuse of every variety
of his own manufacture of best quality, and at moderate prices.
Price Lists and Sample Cards may be had on application at the above address

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PATENT STEAM ORE STAMPER.

The MOST SIMPLE AND ECONOMICAL DIRECT-ACTING STEAM-OR
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Apply, for prices and particulars, to **WILLOUGHBY BROTHERS, Foundry,**
Redruth; or Central Foundry, Plymouth.

THE BURLEIGH ROCK DRILL.

THE BEST AND ONLY PRACTICAL DRILL
IT DOES NOT GET OUT OF ORDER.

PROGRESSES through Aberdeen granite at the incredible rate
10" per minute.

SAVES £5 a day as compared with hand labour, independent of the
enormous saving effected in the general expenses, such as PUMPING,
VENTILATION, INTEREST OF CAPITAL, &c., from the fact of the
"put out" being increased four-fold.

DRILL POINTS.—The saving in steel alone is considerable. One
drill will go through 20 feet of Aberdeen granite
without sharpening.

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IRON AND METAL AGENT,

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Wrought-iron or Steel Weldless Locomotive Carriage and Wagon Tyres,
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Fish Plates, Bolts and Nuts, Spikes, Cranes, Jacks, Rivets, Hurdles,
and Chains.

Black or Galvanised Telegraph Wires, Fencing Wire.

BLACK, OILED, and GALVANISED CORRUGATED SHEETS.

Boiled Iron Joints, Wrought-iron Girders, Roofs, Bridges, Tanks, Boilers, &c.

Boat Girders, Tank Bridge and Boiler Plates.

Angle, Tee, and Girder Iron.—Nail Rods, Tin Plates, Hoops, Sheets, Lead, Cop-
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Hot and Cold Blast Pig Iron, &c., &c.

THE PATENT SELF-ACTING MINERAL DRESSING

MACHINE COMPANY (LIMITED).

T. CURRIE GREGORY, MINING ENGINEER.

OFFICES:—62, ST. VINCENT STREET, GLASGOW

This company grants licenses, under their patents, for the use, singly or in
combination, of the most approved machinery for dressing ores, comprising
Stamps, Jiggers, Side-blow Percussion Tables, Classifiers, and Buddies.

The whole in combination are in successful operation at Rhoswydol Mines,
Machynlleth, and the Bog Waste, Shropshire.

The Jiggers are largely used at the Van, Caldbeck Fells Mines, and at many
mines, with unequalled success.

Self-acting Floors are in course of construction at various Mines in England
and Scotland, regarding which Mr. GREGORY will be pleased to give informa-
tion, answer all enquiries, and give orders for inspection.

He is prepared to give designs and estimates for the supply of Machinery,
and for the laying out of Floors.

LICENSED MAKERS FOR GREAT BRITAIN.

Messrs. WILLIAMS, Perran Foundry Company, Cornwall, for Cornwall
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Messrs. EASTON AND TATERSALL, Leeds, for part of Montgomery-
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Yorkshire south of Ripon.

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Messrs. THOMAS LAMB AND SONS Glasgow, for Scotland.

All are licensed to make for Foreign Parts.

T. CURRIE GREGORY, Secretary.

ORE-DRESSING MACHINERY.

SEPARATION TROMMELS.—Cylindrical, double cylindrical,
conical, double conical, and cascade trommels.

JIGGING MACHINES.—Continuous, for coarse and fine sand.

CLASSIFIERS.—For fine sand and slimes.

SHAKING TABLES.—End and side blow.

BUDDLES.—Concave, convex, and continuous.

PERFORATED PLATES.—For Trommels, Jigging Sieves, and
Stamps' Grates.

For particulars, apply to—
MESSRS. KEMMER AND CO.,
CLARENDON GROVE, DRUMMOND STREET, N.W., LONDON

MACHINERY FOR MINES AND SLATE QUARRIES

SAWING, PLANING, DRESSING, AND ROCK-BORING MACHINES
FOR SLATE.

**WATER BALANCES, WATER WHEELS, WINDING AND PUMPING MA-
CHINERY; and PLANT of every description for MINES or QUARRIES.**

STEAM ENGINES—STATIONARY, MARINE, or LOCOMOTIVE

BOILERS AND GIRDER WORK.

SHAFTING, PULLEYS, AND GENERAL MILLWORK.

MACHINERY AND GENERAL CASTINGS.

**SPUR and BEVEL WHEELS of any diameter or pitch moulded by machin-
DE WINTON AND CO.,**

UNION IRON WORKS, CARNARVON.

BARKER'S IMPROVED PATENT FUEL

(FROM COAL DUST).

PROTECTED BY ROYAL LETTERS PATENT.

This FUEL, made from dust coal, GIVES IN USE RESULTS SUPERIOR
TO THE BEST COAL. It is thoroughly waterproof, stacks without liability
to spontaneous combustion, loss, or deterioration on board ship, or in any cli-
mate, and in 30 per cent. less space than coal.

It burns with little smoke, forming itself into coke; it is very durable, the
combustion is perfect, and it will not fall or disintegrate in great heat before a
blast or strong draught, nor does it produce clinker.

It will bear rough usage and handling, without breakage.

As regards the manufacture, it is easily and cheaply made; the machinery
required is simple, effective, and comparatively inexpensive. No heavy pres-
sure is required, or exposure to heat, after moulding to dry or coke (as is usual),
and after mixing the blocks could, if desired, be made up by hand labour; but
for large production self-acting machinery is recommended, and when moulded
the fuel is at once ready for use or transit.

The PROPRIETORS of the PATENTS are prepared to GRANT LICENSES,
and would, if desired, UNDERTAKE CONTRACTS TO PROVIDE MACHINERY,
ERECT WORKS, and put the same into satisfactory operation, on any required
scale of manufacture.

Applications to be addressed to either of the undermentioned:—

MR. DAVID BARKER,

OLDBURY HOUSE, NORTHFLEET, KENT.

MR. THOS. D. CLARE,

13, ST. MARY'S ROW, BIRMINGHAM.

MESSRS. VAUGHAN AND SON, PATENT AGENTS,

54, CHANCERY LANE, LONDON, E.C.

JOHN AND EDWIN WRIGHT,

PATENTERS.

(ESTABLISHED 1770.)

MANUFACTURERS OF EVERY DESCRIPTION OF
IMPROVED

PATENT FLAT AND ROUND WIRE ROPES

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING SIGNAL AND FENCING STRAND, LIGHTNING CON-
DUCTORS STEAM PLOUGH ROPES (made from water and horsehair),
patent steel wire, HEMP, FLAX, ENGINE LARK, COTTON WASTE,
TARPAULING, OIL SHEETS, & RATTICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.

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HEAT-ENDURING PAINT.

THE TITANIC PAINT WILL ENDURE A DEGREE OF HEAT
that will ENTIRELY DESTROY all other known Paints.

BARNS OF IRON have been coated with all the various known Paints, and
placed in the flames of forges while in operation, and in other equally trying
situations. IN EVERY CASE THE TITANIC PAINT HAS BEEN UNIN-
JURED, while ALL THE OTHER PAINTS WERE TOTALLY DESTROYED.

The TITANIC PAINT also affords a PERFECT PROTECTION TO IRON
FROM OXIDATION in any situation, and PRESERVES WOOD AND OTHER
MATERIAL FROM DECAY.

Contracts undertaken to paint roofs of railway stations and other important
works, guaranteeing results for a term.

Information, as to prices, terms, &c., with particulars of trials, and opinions
of its value from consumers, can be obtained on application to—

THE TITANIC PAINT AND COLOUR COMPANY,

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THE NEW PETRIFYING SILICATE PAINTS,

MANUFACTURED BY THE

SILICATE PAINT COMPANY,

Contain Silica in a peculiar form, extracted from a mineral of volcanic
origin, only as yet discovered in a single deposit, rendering the surface of iron
and wood indestructible and unchangeable, causing the paint to petrify; it has
no chemical action like lead paints when applied to metal; it sets quickly, and
dries as hard as marble; its covering properties are so much greater than ordi-
nary paint that it is the most economical of all paints.

TO SHIPPERS.—It will stand intense frost or tropical heats, and resist the
action of salt water.

It is particularly adapted for flattening purposes, and all kinds of out and in-
door iron and wood work, railway bridges and carriages, iron houses, ships'
bottoms, mining plant, and all descriptions of wood and iron work.

SUPPLIED IN ALL COLOURS.

THE PETRIFYING LIQUID, OR SOLUTION OF SILICA,

FOR RENDERING

BUILDINGS OF STONE AND BRICK, PLASTER, AND CEMENT WORK
IMPERVIOUS TO DAMP.

SILICATE PAINT COMPANY,

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WILTON'S MATHEMATICAL INSTRUMENT ESTABLISHMENT

REMOVED from St. Day to A. JEFFERY'S, CAMBORNE.

W. H. WILTON begs to thank his friends for their liberal support for so
many years, and informs them that (having opened business at Valparaiso)
he has now declined business in England in favour solely of Mr. A. JEFFERY,
MATHEMATICAL INSTRUMENT MAKER, CAMBORNE, whom he considers
(having been an assistant to his father for several years) is in every way cap-
able of creditably maintaining the good name universally awarded to Wilton's
instruments.

A. JEFFERY

Respectfully begs to inform Mine Managers, Surveyors, Engineers, &c., that
having purchased Mr. Wilton's business, and the very valuable acquisitions and
appliances belonging thereto, he has enlarged his Mathematical Instrument
Manufacture, and is prepared to supply THEODOLITES, DIALS, POCKET DIALS,
LEVELS, TRAVERSING and PLAIN PROTRACTORS, CASES OF DRAWING IN-
STRUMENTS, MEASURING CHAINS & TAPES, ASSAYERS' SCALES & WEIGHTS,
ENGINE COUNTERS, and, in short, every description of Instruments used in
SURVEYING, MEASURING, MAPPING, &c.

Repairing in all its branches promptly attended to.

LABORATORY OF ANALYTICAL CHEMISTRY,—

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ESTABLISHED 1859.

ANALYSES and REPORTS on METALLIC ORES, METALS, &c., daily at-
tended to by Dr. T. L. PHIPSON, F.C.S., Member of the Chemical Society,
Paris, &c.

Registration of New Companies.

The following joint-stock companies have been registered:—

MONTROTTIER ASPHALTE AND CEMENT CONCRETE PAVING COMPANY (Limited).—This is a company for acquiring the exclusive right to the concession of valuable asphaltic mines at Montrotier, in the department of La Haute Savoie, France, and also for acquiring in conjunction therewith the leasehold blue lias lime and cement stone quarries at Lyme Regis, Dorsetshire. Its capital is 120,000*l.*, in 10*l.* shares. The subscribers are—H. Curry, 37, Norfolk-street, Strand; F. W. Stent, 10, Park-street, Westminster; Lieut.-Col. A. W. Drayson, 6, York-crescent, Woolwich; Henry Adney, 17½, Kensington-place, Page-street, Westminster; Lieut.-Col. Charles Napier Sturt, M.P., 61, St. James's-street, S.W.; William Elliott Duncan, 8, The Park, Twickenham; Thomas Snowden, Stockton-on-Tees; each of whom takes up 25 shares.

LANESEA LEAD AND ZINC MINING COMPANY (Limited).—Capital 24,000*l.*, in 12,000 shares of 2*l.* each. This company is formed for purchasing the lease and concessions of certain lead, zinc, and other mines, situate in Spain. The promoters are—Richard Taylor, 6, Queen-street-place, 200 shares; John Taylor, 6, Queen-street-place, 200 shares; J. R. Peill, Longcroft, Hayes, 200 shares; W. Cox Spurrers, Harlow, Essex, 150 shares; H. D. Abercrombie, Whitfield-street, Tottenham-court-road, 200 shares; Robert Henty Rothley Temple, Loughborough, 150 shares; H. Swaffield, 5, Queen-street-place, 10 shares.

CHEMICAL LIGHT COMPANY (Limited).—Capital 30,000*l.*, in 15,000 shares of 2*l.* each. This company proposes to purchase from Mr. Henry Howse, of St. Benet's-chambers, Fenchurch-street, his patent rights for improvements in lucifer matches, and to manufacture and sell these indispensable little articles. The subscribers are—William Derry, 100 shares; T. J. Fallon, 1, Arundel-gardens, W., 100 shares; A. A. Speed, Marlborough-road, Putney, 100 shares; Thos. R. Eames, St. Michael's-house, Cornhill, 100 shares; Walter H. Brown, 140, Cambridge-street, Ecclestone-square, 5 shares; Samuel Crane Fox, 51, Cambridge-gardens, W., 100 shares; Leonard Jesse, 474, Old Kent-road, 5 shares.

CENTRAL PRESS COMPANY (Limited).—This company proposes acquiring the business of Mr. William Saunders, of 112, Strand, and carrying on the business of newspaper proprietors, printers, reporters, and publishers. It intends to purchase the copyrights of the *Star* and *Central Press* newspapers, and to acquire the premises, &c., of the Central Press Stereotyping and General Reporting Agency. The capital is 15,000*l.*, in 10*l.* shares, and the promoters of the company are—Major C. J. Keith Falconer, 7, Gledhow-gardens; Leonard Sedgwick, J.P., Carlton Club; J. T. Snell, 85 and 86, Cheapside; J. H. Munday, 32, Middleton-road, New Wandsworth; James Barton, 23, Great George-street, Westminster; C. J. Fox, 4, Great St. Helen's; P. H. Watts, 1, Montague-road, West Dalston. These all take one share each.

PATENT IRON DOOR AND SHUTTER COMPANY (Limited).—Capital, 60,000*l.*, in 6,000 shares of 10*l.* each. This company is formed to acquire certain patents, the property of Mr. James Bigwood, for "improved iron doors, especially adapted for use in ordinary buildings;" also other patents for "improvements in iron shutters;" and others granted to Henry Royall Minns, Francis Ellis, and John Ellis, for "certain improved mechanisms for securing the doors of safes, strong-rooms," &c. The company also takes over the business and plant of Mr. James Bigwood, and is empowered to work or dispose of the same, as well as to grant licences, &c. The promoters, who take 10 shares each, are—Messrs. James Bigwood, 5, Great George-street, Bristol; William Branscombe, 92, Pembroke-road, Clifton, Gloucestershire; J. May Munro, jun., Hill View House, King's Wood, Gloucestershire; William House, 8, Victoria-street, Clifton; James Burgess, the Mall, Clifton; George Anson, 41, Queen-square, Bristol; Charles Coldrick, 13, Lower Manolus-street, Bristol.

THE VALPARAISO WATERWORKS COMPANY (Limited).—Capital 200,000*l.*, in 20,000 shares of 10*l.* each. This company is formed to supply Valparaiso with water drawn from the river Aconcagua. The promoters are Francis H. Webb, 2, Berners-street; H. Wyndham, Croydon; Joseph Robinson, Berkhamstead; John Chapman, 2, Leadenhall-street; Albert Ricardo, 11, Angel-court, E.C.; and N. G. Burch, 27, Alderney-row, N.E.; each of whom takes one share.

CAT HOLES MINE COMPANY (Limited).—Capital 4000*l.*, in 12 shares. This is a company which having been constituted by rules and regulations dated July 1, 1869, has now been registered as an "existing" company, with limited liability. The whole capital is subscribed for by 18 members, the first seven of whom are Messrs. B. Ballden, 13, High-street, Halifax, 20 shares; J. M. Calvert, Gargrave, near Leeds, 100 shares; William Cookson, Holbeck, Leeds, 100 shares; Thomas Dalton, Burley-road, Leeds, 100 shares; Francis Dibb, Gledston Hall, near Marston, 50 shares; Isaac Douglas, Knott's-road, near Todmorden, 485 shares; John Gledhill, 14, Alion-street, Leeds, 1530 shares.

EAST LONDON CEMETERY COMPANY (Limited).—Capital 30,000*l.*, in 6*l.* shares. The object of this company is to provide a burial place for the inhabitants of the densely populated East End of London. For this purpose a considerable piece of land at Plaistow and West Ham has been acquired, which has been duly approved of by the authorities as suitable for the purposes for which it is intended. The subscribers are John Meeson, Stratford, 5 shares; R. W. Kearns, Woodleigh Cottage, Cold-harbour Lane, Camberwell, 5 shares; W. H. Sewell, the Green, Stratford, 5 shares; Thomas C. Sewell, St. Mary Axe, 5 shares; W. W. Jobson, 16, Fish-street-hill, E.C., 50 shares; George Mills, 11, St. George's Terrace, Regent's Park, 100 shares; Edward Gellatly, 109, Leadenhall-street, 50 shares.

SYDICAUTE UNION (Limited).—Capital, 2,200,000*l.*, in 500*l.* "A" shares, and 5*l.* "B" shares. This is a finance company formed to advance money for all sorts of objects to Governments and other corporate bodies, &c. The directors are the Hon. Thos. C. Bruce; Ignace Ephrussi; Pascoe Du Pré Grenfell; Robert Amadeus Heath; Charles De Mayor; Herman Raffalovich; Chevalier M. de Springer; Baron Edward von Todesco; Albert Warberg; Baron G. de Worms.

DRESSING ORES.—Some twelve months since Mr. C. F. COLLOM, of Calstock, invented an improved apparatus for separating metals or metalloids from other substances, and he has now patented some further improvements, which consist in dividing the revolving table into two parts or concentric circles, one part being arranged by preference at a different angle to the other. A pipe for washing off the ore is so formed as to wash off the ore from the different portions of the table at separate points. The ore from the upper portion of the table is washed off by one portion of the washing-off tube into a launder or shoot, and carried into a receiver or hutch without touching the lower portion of the table, whilst the ore from the lower portion of the table is washed by another portion of the washing-off tube into another receiver or hutch. The water and the refuse and tailings from the general surface of the table is washed into circular receivers or hutches. The table may be divided into more than two parts or concentric circles at the same or different angles. Several washing-off tubes may be employed, operating alternately or together. The invention also relates to means particularly applicable to cleaning or dressing gold and silver. In this case grooves or channels are formed in the table or tables for the reception of mercury. The tables in each case may incline to or from the centre.

BORING AND DRILLING MACHINERY.—The invention of Mr. J. W. PARKER, of Camberwell, consists of a bracket frame, or brace, for boring and drilling, so constructed as to be capable of attachment by atmospheric pressure to the solid surface against which the said bracket is to be held. The said bracket consists of two uprights, connected at their upper ends by a cross-bar. To the foot of each upright is fixed or jointed a flat metal frame, having at its underside a disc of india-rubber or leather. These discs are capable of being raised or drawn into their frames by means of screws, so as to leave a vacuum between the said discs and the surface against which the bracket is to be held, and thus cause the said bracket to be held firmly against the said surface. When the bracket is used for boring, the auger spindle revolves and is driven in a bearing formed in the cross-bar herebefore referred to, and is driven by a pulley, which is connected to the said spindle by means of a groove and leather. When the bracket is used for drilling, "centres" are pushed in the cross-bar for the upper end of the drill spindle to bear against.

BLAST-FURNACES.—The feature of novelty which constitutes the invention of Mr. ANDREW BARCLAY, of Kilmarnock, is the forming of a series of openings, or an annular flue in the upper part of the furnace, from which pipes or passages are led to lower levels, and through which pipes or passages the waste gases of the furnace are led down and introduced again into the furnace to act as fuel, or the reverse—that is to say, the gases may be taken off at a higher level, and introduced at a higher one, along with the necessary quantity of air.

Meetings of Public Companies.

PRINCE OF WALES MINING COMPANY.

A quarterly meeting of shareholders was held at the offices, St. Michael's House, St. Michael's-alley, on Thursday, Mr. J. Y. WATSON, F.G.S., in the chair. Mr. JEHU HITCHINS (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts was submitted, which showed a loss upon the operations of the quarter of 568*l.* 10*s.* 8*d.*—that is, without crediting 300*l.* worth of ore, and charging for the entire cost of the stamps. The assets exceeded the liabilities by 831*l.* 15*s.* 7*d.*

The report of the agents was read, as follows:—
Aug. 30.—Since the last general meeting we have erected 12 heads of stamps, attached to the drawing-engine, which have been working one month by night. Strips, buddies, &c., for dressing purposes are being got on with as fast as required. The masons are also getting on with the burning-house and flues as fast as possible, and we hope to get it all complete in five weeks from this date. Two winzes have been sunk, one in the bottom of the 65 west, and is communicated with the 77 fm. level; this winze has laid open profitable copper ground for stopping, and given good ventilation. The other in the bottom of the 65 east, under the low shaft; this is also communicated with the 77 fm. level, has laid open good tin ground, and thoroughly ventilated that part of the mine. Our present underground operations are as follow:—Six ends driving, with eight stopes and two tribute pitches. The 90 fm. level has been driven east 7 fms., lode varying from 1 to 1½ ft. wide, yielding occasional stones of tin and copper ores; in the present end it is 2 ft. wide, producing good stones of copper ore; driving by six men, at 9*l.* per fathom. The 90 west has been driven 7 fms., lode varying from 1 to 1½ ft. wide, composed principally of capel, with stones of mundle and copper ore intermixed; driving by six men, at 8*l.* per fathom. The 77 east has been driven 2½ fms.; lode 2½ ft. wide, worth 10*l.* per fathom for tin; driven by two men, by the side of the lode, at 5*l.* 10*s.* per fathom. The 77 west has been driven 4 fms.; the lode in the present end is worth 18*l.* per fathom; driven by six men, at 9*l.* per fathom. The stope in the back by the same pare, at 3*l.* 10*s.* per fathom; lode worth 12*l.* per fathom. The 65 east has been driven 2½ fms.; lode 2½ ft. wide, worth 8*l.* per fathom for tin; set to two men, at 4*l.* per fathom. Also a stope in the back of this level, by four men, at 2*l.* 15*s.* per fathom; lode worth 8*l.* per fathom for tin. The 55 cross-cut north is driven 4½ fms. north of north lode, ground very hard and spare for progress; present price for driving, 12*l.* per fathom, with no indications of a lode as yet. The 55 west will be set as soon as we can get men to take it. No. 1 stope, in the back of the 77 east, by two men, at 2*l.* 10*s.* per fathom; lode worth 10*l.* per fathom for copper. No. 2 stope, in the back of the 77 east, by two men, at 2*l.* 3*s.* per fathom; lode worth 7*l.* per fathom for copper. No. 3 stope, in the back of the 77 west, by two men, at 3*l.* 5*s.* per fathom; lode worth 6*l.* per fathom. No. 1 stope, in the back of the 65 fm. level east, by four men, at 2*l.* 15*s.*; lode worth 8*l.* per fathom for tin. No. 2 stope, in the back of the 65 east, by four men, at 2*l.* 10*s.* per fathom; lode worth 10*l.* per fathom for copper. The stope in the bottom of the 65 west by two men, at 2*l.* 10*s.* per fathom for copper. The stope in the back of the 45 east by four men, lode worth 10*l.* per fathom for copper. Tribute Department: A pitch in the back of the 65 east by four men, at 5*l.* in 1*l.*, and 12*s.* 6*d.* per unit; lode worth 15*l.* per fathom. A pitch in the back of the 45 by two men, at 12*s.* in 1*l.*, and 12*s.* 6*d.* per unit; lode worth 5*l.* per fathom. Silver Department: The 20 fm. level, west of the Queen silver shaft, is driven 10 fms.; in the last 4 fms. the lode varies from 1 to 2 ft. wide, composed principally of flookan and mundle, with a little silver intermixed, but not in paying quantities. The stope in the back of this level continues to yield very good silver ore. The Queen Company have sunk the shaft 8 fms. below this (the 20 fm. level) to the supposed depth of the deep adit, and have commenced driving east at the bottom. Some good work for silver has been raised in sinking, and there is a small branch of silver ore in the western end of the shaft in our ground, which we intend working as soon as convenient. We shall also commence clearing the western silver shaft the latter part of next week. On Friday last we sampled a parcel of silver ore, computed 9 tons, samples of which we have sent to the office, and we hope at the end of the month to sample 20 tons of good quality copper ore. Should the tin also equal our expectations, we shall sell by the next meeting 6 tons. In conclusion, we hope you will consider the amount of preliminary work done in sinking winzes, &c., to cut out tin ground to supply the stamps erected with stuff, and also the extra cost incurred in labour and materials, erecting the same, laying out dressings, &c., for which there is as yet no counterbalance in the shape of tin sold. Taking into account, however, the kindly appearance of the 90 east, yielding good stones of copper ore, also the 77 west, which is a large strong lode, worth the full value put on it, not forgetting that this is full 20 fathoms further west than any of our previous shoots of tin, together with the prospect of making a good return from the tin department, having, too, a good branch of silver in the west end of the Queen silver shaft, 8 fms. below the present workings, that we hope to commence operations on shortly, we think our prospects are more cheering than for the past year. —J. GIFFORD, F. PHILLIPS.

The CHAIRMAN stated that the accounts might before they were looked into be considered somewhat disappointing, as the costs incurred for and in the erection of the tin stamps, and charged in the quarter, amounted to 300*l.*, while there was tin in course of preparation for market worth at least 300*l.*, and silver 110*l.*, so that without the extra cost, which in reality is adding plant to the mine, and taking the ores unsold, there would be a profit on the quarter of more than 100*l.*, instead of a loss of 568*l.*, which the accounts show. Before next meeting at least 6 tons of tin will be sold, worth 450*l.*, and the agents hope to commence working on a rich course of silver at another level. During the past quarter at the upper level the silver had not been rich, and the produce valued at about 100*l.*. In reference to the mine, the bottom levels were very promising, and the ends above were worth 36*l.* per fm.; stopes, 77*l.*; pitches, 20*l.*; total value of points in operation 138*l.* per fathom, so that for the future the prospects were certainly very encouraging. In reference to sinking the shaft, he (the Chairman) said the bottom ends had scarcely been driven far enough yet for proper ventilation, and the new shaft, which would be long the principal one, was going down on the lode, and now 77 fms. deep.

Mr. HITCHINS, in reply to a question, stated that the 55 cross-cut north had been driven since the last meeting, but no increase of water or ore had been met with. He was more than ever satisfied that his opinion would be confirmed that the richest part of the mine would be found west—for a distance, in the 77 the lode was 18 ft. per fathom, at a point 20 fathoms further west than the lode had been to value in any of the upper levels.

The motion adopting the report and accounts was put, and carried. A vote of thanks to the Chairman terminated the proceedings.

WEST PRINCE OF WALES MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, St. Michael's House, on Thursday, Mr. S. W. DAVIES in the chair.

Mr. JEHU HITCHINS (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed. A statement of accounts was submitted, which showed a balance of liabilities over assets of 439*l.* 14*s.* 4*d.*

The report of the agent was read, as follows:—
Aug. 30.—Since the last general meeting we have changed all the pitwork in the shaft, and have cleaned up and repaired the same. We have driven 4 fms. east and 3 fms. west on the course of the lode, which is full 5 ft. wide, composed of capel, quartz, prlan, mundle, &c., tin, worth for the latter 4*l.* per fathom. Although the lode is not so good for tin as was reported by Mr. HITCHINS, and myself, its size and character are all that can be desired for the production of great quantities of tin; and I would recommend the ends both east and west being prosecuted by the side of the lode with all speed, and the same cut into when deemed necessary. —J. GIFFORD.

The CHAIRMAN explained in reference to the accounts that the cost of the boilers, new pumps, &c., had amounted to 361*l.* 10*s.* 3*d.*, and the debit balance of 439*l.* 14*s.* 4*d.* rendered it necessary to make a call of 1*s.* per share.

The accounts were passed, and it was moved by Mr. J. Y. WATSON, and seconded by Mr. W. S. SUTTON, that a call of 1*s.* per share be made. The CHAIRMAN remarked that the object in getting this new machinery was to drive the eastern end, which was some 40 fathoms deep, under where considerable quantities of tin were raised many years ago, and this was considered the one important point in the mine, but it appeared now that the west end also was productive.

A vote of thanks to the Chairman terminated the proceedings.

CALDBECK FELS MINING COMPANY.

The half-yearly meeting of shareholders was held at the offices of the company, Carlisle, on Monday.—Sir R. BRISCO, Bart. (Chairman of the board of directors), presided; and there were also present Mr. Banks, Highmoor House; Mr. R. Brockbank, Carlisle; Mr. Irving, sharebroker; Col. Brisco; Mr. Brown, Lichfield; Mr. Elliot Aspinwall; Mr. E. Banks, Mr. Mulcaster; Mr. Crosthwaite, Workington; Dr. Cowan, Capt. Hawke, and Mr. Lainton (secretary).

The SECRETARY having read the notice convening the meeting, the seal of the company was affixed to the register of shareholders.

The report (which was given in last week's Journal) referred to the continued improvement in the mine, the ores having been sufficient to meet the cost, and leave a small profit on the half-year's working. The report adds that the amount expended on the capital account during the half-year had been 375*l.* 12*s.* 4*d.*, which included the cost of a steam engine and water-wheel. The directors are glad to be able to state that the Albion Bank have compromised their claim against the company for the sum of 50*l.*, each party paying their own legal expenses. That claim being settled, the directors recommend that the forfeited shares, which were the subject of litigation, should now be distributed *pro rata* to the shareholders, to be issued at the rate of 2*s.* per share, with a view to the liquidation of the bank debt. The manager's report, which referred principally to technical points in the working of the mine, was also presented to the shareholders.

The CHAIRMAN, in moving the adoption of the report and statement of accounts, said he was happy to see they had now got to the present favourable position in the mine. They were now clearly, as far as they could believe, looking forward to immediate success. They were informed, and they had every reason to believe it was true, that a large amount of ore was laid open, and ready to be brought out of the mine as soon as all their washing machinery was in motion. They had laboured under

very great difficulties in former years owing to the droughts of summer and the frosts of winter, and they were reluctant to lay out capital until they were able to see their way to overcome these difficulties. He next mentioned that it had been decided to put down a turbine wheel, which would be worked by water coming from the upper surface of the earth. That water ultimately went to the washing floor, but on its way was made to work the turbine wheel. Of course, water was substituted for coal, which was a very costly article. They were informed that they had laid open now in the mine property in ore to the value of 50,000*l.*; but, of course, there would be additional costs of washing, &c., to enable it to be brought into the market.

Dr. COWAN seconded the motion, and congratulated the shareholders on their very favourable prospects. He hoped that in a short time they would be enabled to give the shareholders a good dividend.

Mr. CROSTHWAITE pointed out that the re-issue of the forfeited shares would not clear off the debt. They would still be 1500*l.*, or 1600*l.*, to the bad. He suggested that it would be better to make a call to clear off the debt. Col. BRISCO said in the accounts a great many items were lumped together, and thought it would be more satisfactory to the shareholders if attached to the accounts there was also an explanation given of these different items. The CHAIRMAN said the directors had nothing to conceal. If the shareholders wished to have their accounts more voluminous there could be no objection. Mr. LAINTON proposed that the office expenses, &c., should be given in detail next half year.

Mr. BROWN enquired what was the average cost of dressing?—Capt. HAWKE replied that at present it was 20*s.* to 21*s.* per ton. Formerly the cost was 35*s.* The heavy cost of carriage was also mentioned, and Mr. BANKS said there was a strong feeling for a railway in the neighbourhood, and he should think a meeting on the subject would shortly be held at Hesketh-new-Market.

The motion approving of the report and statement of accounts was put and carried unanimously.

Col. SALKELD moved, "That the forfeited shares be allotted *pro rata* to the shareholders at the rate of 2*s.* per share on Sept. 1, and that a deposit of 10*s.* per share be paid to the company's bankers on or before Sept. 14, otherwise the allotment will be cancelled." He reminded Mr. Crosthwaite that shares had been purchased at the rates proposed, and a fortnight or three weeks ago they were much lower. He was of opinion that if they made an additional call it would have a disastrous effect. Mr. BANKS having seconded the motion, Mr. CROSTHWAITE explained that he did not object to the price, but what he said was that the issue of the forfeited shares would not clear off the debt. They were now in debt at the end of the half-year to the amount of 7572*l.* odd, and as the forfeited shares would produce only 5806*l.*, there would still be a debt of the sum of 1667*l.* 13*s.* 11*d.*—After a few words from Mr. R. BROCKBANK, approving of the resolution, it was put to the meeting and carried.

Mr. BANKS moved, "That should any of the forfeited shares not be taken up, the directors are hereby authorised to dispose of them in such a manner as they may think best for the interests of the company."—Mr. MULCASTER seconded the motion, which was agreed to, as was also a vote of thanks to the Chairman and Secretary.

Several fine specimens of copper ore taken from the mine were exhibited on the table, and, at the request of the Chairman, Capt. HAWKE explained to the meeting as to what parts of the mine the ore was taken from, adding that it did not contain less than 78 or 80 per cent. of copper.

AUSTRALIAN UNITED GOLD MINING COMPANY.

A general meeting of shareholders was held at the offices, Austin-friars, on Monday.—Mr. WINGROVE in the chair.

Mr. J. H. MURCHISON (the London Manager) read the notice convening the meeting.

The CHAIRMAN said the object of the present meeting, as indicated in the notice, was to consider the present position of the company, and a plan for its re-constitution. Having apologised for calling the shareholders together at this season of the year, he stated the directors would not have done so had it not been urgent to take the sense of the shareholders as to the most advisable course to be adopted in the present position of the company. Several shareholders had written to the board approving the suggestion that something should be done to put the company upon a more satisfactory basis; and other circumstances justified the directors in believing there was a desire on the part of the shareholders to relieve the company from the slough of despond into which it had fallen. The original capital of the company was 50,000*l.*, but by the issue of preference and discount shares it had increased to 56,816*l.* Of the original capital of 50,000*l.*, the sum of 25,000*l.* was paid for the purchase of the property, leaving an amount manifestly insufficient to thoroughly develop the resources of the mines. Although neither in the Duke of Cornwall nor the Central Mine has the object been attained for which the company was started, yet there had been received 3657*l.* for gold raised from the Duke of Cornwall, and 2519*l.* from the Central Mine—an amount equal to the capital subscribed for preference and discount shares, and which had been received since those shares were subscribed for. The present liabilities of the company amount to 9236*l.*, of which there was owing to Mr. Kitto for advances he had made to the company 2803*l.*, less 1000*l.* for preference and discount shares which he had taken. Mr. Lamb had also advanced 224*l.*, but had taken 500*l.* worth of preference shares, leaving 1724*l.* due to him. The unpaid salaries amounted to 1770*l.*; mine wages and royalty, 2121*l.*; bank overdraft in colony, 566*l.*; London liabilities, 150*l.*; making a total of 8236*l.*, to which must be added 1000*l.*, which the Bank of Victoria had advanced upon mortgage of the Central Mine. On the other side, there was cash in hand 160*l.*, and arrears 1033*l.* The debts immediately pressing were those under the head of mine wages, merchants, and royalty, amounting to 2121*l.*, and the non-payment of those amounts placed the company in a position of serious difficulty in Australia, inasmuch as the men would have applied for and no doubt, obtained judgment against the company, and had probably attached the property. By the last advices from Australia the directors were informed that Mr. Kitto had transferred his claim to the Bank of Victoria, and in order to secure the mine would, no doubt, foreclose for their debt in the first instance. Mr. Kitto proposed to sell the Duke of Cornwall, for which he hoped to obtain a price that would not only pay off all the debts of the company, but leave a sufficient margin to work the Central Mine; but the directors hoped an effort would be made by the shareholders to prevent that mine passing out of their hands. The Central Mine remained the property of the company, subject to a debt of 1000*l.*; and that mine, it should be remembered, had yielded gold to the value of nearly 3000*l.* from a very small portion of ground. The directors had appealed to the shareholders, and had done everything in their power to raise the necessary additional capital, but had not succeeded. They had, however, recently been consulting as to the propriety of re-constituting the company upon a different basis. The plan proposed was to form a new company, in 60,000 shares of 2*l.* 10*s.* each; to give the holders of the 1883 preference shares five shares in the new company for each one preference share, which would take 9915 shares; to give the holders of the 3718 discount shares the same number in the new company; and to give the holders of the 20,000 original ordinary shares 4000 of the new shares—that is, one for every five. There would thus be absorbed 17,633 shares in the new company. Of the remainder it was proposed to give a bonus of three paid-up shares for every one share taken at 2*l.* 10*s.*; this would absorb 30,000 shares for bonus and 10,000 for cash, leaving in reserve 2367 shares. The 25,000*l.* cash thus obtained would go to pay off the debts of the old company (say, 10,000*l.*), and leave 15,000*l.* for the further development of the properties. This proposal was based upon that which had been lately found so successful in the case of the Chontales Company, the difference being that in the latter the debenture holders were the mortgagees, while in the present case the shareholders themselves were placed in the same position as the debenture holders in that company. There was every reason to believe that very little money in addition to paying off the debts of the company would be necessary—probably 5000*l.* or 6000*l.*—to place both the mines in a profitable and dividend-paying position. If it should turn out that under the circumstances he had already mentioned the Duke of Cornwall Mine had been sold, they would still retain the Central, the real development of which had yet to be accomplished. The fact could not be disguised that the company had been started with too small a capital. He then read the formal resolutions that would have to be passed to enable the directors to carry out the proposed re-constructive scheme, which, he explained, could not be carried at the present meeting, but would have to be submitted at a special meeting convened for the purpose.

Mr. DAVIES said his private letters from Victoria informed him that the greatest surprise was expressed in the locality of the mine that the works at the Central had been stopped, everybody regarding it as a certainty that it would become a profitable property.

Mr. WILLIAMSON, in reply to a question, stated that if the Duke of Cornwall Mine had been sold at a reasonable rate, it was the policy of the directors to repurchase it from the Bank of Victoria for the amount of the bankers' debt.

The CHAIRMAN, in reply to a question, stated that any person subscribing 50*l.* in a proposed re-constructed company would obtain 250*l.* worth of stock. The directors hoped to receive by the next mail the report of Mr. Salter upon the company's mines. Mr. Salter was an independent and disinterested authority, who had gone to the colony to visit his own property, which was in the immediate neighbourhood of the company's mines; but good news would be of little value, seeing that at present the board did not possess the means to work the mines. Mr. WILLIAMSON said the board were acting to-day upon the assumption that the company still possessed the Duke of Cornwall—if that were sold,

and could not be re-purchased, there would be no necessity for carrying out the proposed plan.

Major WELLER said the shareholders, in justice to themselves, could not but support the board. They had given very great attention to the affairs of the company, and the only conclusion the shareholders could come to was that the plan now submitted had been well considered, and under the circumstances was the very best that could be submitted.

Mr. ALLEYNE said that after the explanation afforded by the Chairman, and the exceptional inducements held out to the shareholders to subscribe the additional capital required—the question of bonus being a most important one—he had great pleasure in proposing that the meeting approve the scheme submitted by the board, and recommend its adoption. Major WELLER seconded the proposition, which was put and carried unanimously.

A vote of thanks to the Chairman and directors terminated the proceedings.

SATURN SILVER MINING COMPANY OF UTAH.

An extraordinary general meeting of shareholders was held at the London Tavern, Bishopsgate, on Monday.

Mr. J. H. CRAWFORD in the chair.

Mr. H. N. WILKINSON (the secretary) read the notice convening the meeting, which explained that it was called for the purpose of considering the action to be taken on the telegram, which it was expected would be received before the date fixed for the meeting, from Mr. Fowler.

The CHAIRMAN would at once state that the message from Mr. Fowler had arrived on the previous Thursday, and that in the opinion of the directors it was a satisfactory message. The shortness of the interval between the arrival of the telegram and the present meeting had prevented the directors from presenting the shareholders with a formal report. The material points they had to consider was the previous history of the Saturn Mine, and the reason of its being open to purchase by the company; and the reason of Mr. Fowler being sent out to report upon the property on behalf of the company. Capt. Tilden had been many years in California, and connected with mines, and the reason of his being sent out to report upon the property on behalf of the company. Capt. Tilden had been many years in California, and connected with mines, and the reason of his being sent out to report upon the property on behalf of the company. Capt. Tilden had been many years in California, and connected with mines, and the reason of his being sent out to report upon the property on behalf of the company.

Mr. JOHN FIELD enquired whether the tunnel had been completed?—The CHAIRMAN said that it had, and it had struck the lode at 120 ft.

A SHAREHOLDER asked how long Mr. Fowler had been out there?—The CHAIRMAN said he arrived at New York on the 10th, and the telegram was dated the 24th. The SHAREHOLDER remarked that he would take about four days to reach Salt Lake City from New York, they might assume that he had been nearly ten days at the mine before he sent the telegram.

It was ultimately resolved unanimously that the meeting approved of Mr. Fowler's appointment; determined to accept the property, and authorised the directors to give notice of the completion of the purchase; and authorised the directors to pay the \$20,000 payable by the terms of the contract.

The CHAIRMAN thought that as they had disposed of the requisite business, he might mention that they had that day received more favourable intelligence. Working from below at 120 ft. they had cut through 4 ft. of the lode, solid valuable ore, containing gold as well as silver. They had then a small bar of hard ground to cut through before they could take away the remaining 7 ft. of the lode; the information was important, as proving that the lode was similar, though improving all the way down.

Mr. FIELD should have mentioned before that he regarded the appointment of Mr. Fowler as most important. Every confidence could be placed in Mr. Fowler's word, and he was much gratified to find that he could send so satisfactory a report as to the value of the property.

The proceedings terminated with the usual complimentary votes.

IMPERIAL OTTOMAN MINING COMPANY.

A second extraordinary general meeting of shareholders was held at the offices of the company, Moorgate-street, on Thursday.

Mr. J. F. H. READ in the chair.

Mr. C. W. CARPENTER (the secretary) having read the notice convening the meeting, and the minutes of the last extraordinary general meeting, which were approved.

The CHAIRMAN proposed, and Mr. J. DOWNES seconded, the following resolution:—

"That the resolution unanimously adopted at the last meeting of shareholders be now confirmed.—That the Articles of Association of this company be amended by the insertion of the following article after article 18:—18a. The directors may, for the business of the company, if they shall so think fit, issue all or any of the shares in this company remaining unallotted, at such discount, and in such manner as they may think it advisable." Carried unanimously.

The CHAIRMAN expressed his belief that from the recent reports of Capt. Champion and Mr. Harvey (in both of whom the board had the greatest confidence), the prospects of the mine were never really so good as now, and it was generally agreed by the shareholders present that the best plan of raising the necessary capital to carry the works to a successful issue was to issue debentures, with a bonus in shares, to be offered to shareholders, *pro rata* in the first instance. It was proposed by Mr. BURBIDGE, seconded by Mr. F. O. T. DELMAN, and carried unanimously, that a vote of thanks be accorded to the Chairman.

GNOLL COLLIERY COMPANY.

The first annual report of the managers, Messrs. Shelford and Robinson, has just been issued, and appears to be a very satisfactory one. They have successfully carried out what was originally contemplated, and have executed the works and put them into full operation at an outlay within their original estimate. They say—

The engine and boiler houses have been erected by E. Cribb, sen., and are now completed with the exception of a few details which will take about a week to finish. The work has been well and substantially carried out. A 60-hp. pumping-engine has been erected by Messrs. Harvey and Co. of Hayle, Cornwall, together with two Cornish boilers. The engine was tried on Aug. 10, and after certain adjustments had been made, continuous pumping commenced on Aug. 17. The water has already been lowered in the pits 54 ft. 6 in.; at this rapid rate the upper seam of coal will be reached about the middle of October.

The following works have also been executed:—Smiths' and carpenters' shops and stores have been erected. A new road has been made to connect the colliery with the town. The two fire-engine pits have been repaired and enlarged at the surface. A culvert has been made from the pumping pit No. 1 to the town drain, to take off the water pumped from the colliery. A shear legs, capstan, and horse gin have been made for lowering the pumps, and for winding from both pits. These and some minor works have been executed substantially and at the least possible expense, and are now in successful operation. A considerable quantity of tackle, gear, stores, and materials have been obtained.

Two sets of 18 and 15-hp. pumps, by the Williams Ferra Foundry, Cornwall, have been purchased. The 18-hp. set is the one now working in No. 1 pit in connection with the pumping-engine. It is proposed to pump with this set to the first seam at 25 fms. when the 15-hp. set will be attached to pump from the lower seam. The works have all been carried out within the outlay we originally estimated.

The colliery has now been made a going concern, and its value as a mining property may be considered to have been very greatly increased since the company purchased it. We believe that the coal will be reached and worked by the end of this year, and that the favourable opinion of this property which we have from the first expressed will be fully realised.

SHELFORD AND ROBINSON, M.M. Inst. C.E., F.F.G.S., Managers.

NEW MEXICO, AND ITS MINERAL RICHES.

The following is extracted from a private letter:—

"San Masaelo, New Mexico, July 25.
I suddenly abandoned my idea of proceeding to the seat of war, and landed in this country last September, and have during that period seen much to interest me on my travels; and I am convinced that America's wealth in minerals is immense, beyond calculation—at least, none doubt that those who have seen as much as I have in six months just passed in a mining and prospecting tour of five months in Colorado, New Mexico, and Arizona; in which time I walked a distance of over 2000 miles on Indian trails, and much of the time in a portion of the country as yet undeveloped. I have seen wealth enough in the hills to liquidate the united debts of the known world.

In February last I became acquainted with a party of gentlemen from California, who were about starting on a prospecting tour through the before-mentioned territories; and as one of the gentlemen had before visited parts of the country through which they were to travel, and in addition was well versed in mining and the working of ores, I determined to join the expedition, partly for pleasure, and in part to satisfy myself as to the reports we hear continually of the fabulous wealth of the gold and silver mines of America.

We started from Denver, in Colorado, about March 1, on foot, with our provisions, tools, &c., on pack animals, and for five consecutive months we have been in the mountains between the 32nd and 37th parallels, and the Rio Grande river in New Mexico and the Colorado—the boundary between California and the territory of Arizona; and I assure you, except the exposure and fatigues consequent upon a trip of over 2000 miles, I have enjoyed myself intensely, and am becoming daily more and more convinced that the largest fortunes are yet to be taken out of the silver and gold ledges in this country. In Colorado I found some rich mines, but exceeding in richness all my expectations are the silver mines in the territories of New Mexico and Arizona. We travelled while immediately in the mineral-bearing districts very slowly, examining carefully the different ledges and testing the ores; and I believe it to be impossible to find richer ores than are contained in the ledges that we have discovered, taken up,

or located, and secured the properties to. We have found gold, silver, galena, copper, clausbar, and coal, but I shall only devote my attention to the silver mines. One, and the most serious, difficulty in the way of working the mines of Arizona and New Mexico is the scarcity, and in some localities entire absence, of wood and water. With this knowledge and my own observation, I have borne these absolute necessities in a mining district continually in mind, and have been uncommonly successful. We have secured several ledges of silver ore, each of which is a fortune in itself. The ledges are usually well defined, with smooth hanging and foot walls of granite, slate, or porphyry, and in every way calculated for successful workings. In a district hitherto unknown we discovered, and I have secured, about 6000 feet of silver quartz ledge, with an average width of 12 feet on the surface, running along the side of a mountain where the vein can be tapped by means of a tunnel 100 feet long, 250 feet below the surface, and with a river of pure water running at its greatest distance one half mile away, and any amount of pine, oak, and cedar wood in close proximity. I have tested the ores from different portions of this ledge, and, from an assay of \$170 from surface ore, the assays reached the handsome figures of \$2000 per ton from ore 20 feet below the surface, with the ore improving in quality and the vein growing wider. From 40 to 60 per cent. of galena is contained in this ore, which renders the reduction of it by smelting very easy, and at an expense merely nominal when compared with the product on the ore. Labour is to be had at 2s. per day and keep. The location of this ledge, which by those who have seen it is acknowledged the most promising ever opened in this country, is only about 50 miles from the line of survey of the Southern Pacific Railway, now in process of building, and which I have reason to believe will be completed during the years 1872 and 1873. The climate is the most delightful I have ever experienced, not one of our party having suffered from illness during our entire trip. I am now for a day or two at the little Mexican town of San Masaelo, about 40 miles from the boundary line of Old Mexico, procuring supplies and riding mules preparatory to going back to the mines some 130 miles distant, for the purpose of commencing the opening and development of our different veins of mineral. I am preparing maps and detailed descriptions of the quartz ledges, for the purpose of returning home about December 1, and offering the same to the favourable notice of my friends. I am satisfied that with a reasonable amount of capital expended the mines I have discovered will yield immense returns. I shall take to England with me, for the purpose of working at Swansea, several tons of the ores from the different mines."

[ADVERTISEMENT.]

From Mr. JAMES HUME—EBERHARDT AND AURORA: The feature of the week has been the rapid recovery of those shares from the temporary depression produced by "bearing" operations. The news to hand report three great discoveries of silver, described as "immense strikes" and from the depth at which these new deposits are found proves the mines to be making richer than ever in depth. The desire to get the silver in the district "chambers"—a very appropriate term, when the extent of these cavities are considered; for example, that in the Ward Beecher is nearly 300 ft. long, 100 ft. wide, and of unknown depth, containing throughout chloride ore, worth from \$60 to \$1000 per ton and upwards. A new chamber is just struck in the Eberhardt Mine, 400 ft. deep, the ore in which assay from \$1500 to \$3000 per ton. Another chamber is discovered in the North Aurora, also in the company's property, the produce being also very great. The extent of these chambers or strikes have yet to be proved, but they will most likely be found to be of similar dimensions to those already known. The mines were bought on the basis of 300,000 worth of ore being in sight, not including the Ward Beecher. This and the last discovery must have increased the value of this property many times told. The International Mill, of 60 stamps, is now in full work, also the Oas Mill, of 10 stamps, besides which, the Stamford Mill is also employed on Eberhardt ore. The returns henceforth may be expected to be of a gigantic character. SOUTH AURORA shares are also improving in value. A great deal of prospecting is being done, and any day a "strike" may be made here. Cornish tin shares have suffered a relapse, and the market generally is of a drooping tendency. A 2d. dividend only in CANARY BAZA is a great disappointment to some. EAST LOVELL: The change in this mine is no matter for exultation, but the reverse. No doubt a great many investors bought at high prices, notwithstanding our repeated warnings of the danger of doing so. For their sake let us hope that further rich bunches may be found.

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

OLD LANGYNOG.—An important discovery was made at this mine on Aug. 24. In driving west in the 90 they have cut the lode richer than was ever seen in any part of the mine before; this must be rich indeed, considering they have had years ago in this mine a lode of solid silver-lead 5 yards wide, 150 yards long, and about the same in depth, which gave enormous returns. This old mine has been at work over 70 years, and during that time has returned nearly 5,000,000 worth of ore, and it is likely from present appearances in the western part of the set to be very profitable for many years to come. They are now erecting a very powerful engine at the western part, to drive them to sink a shaft, and work the lode at deeper levels. The adjacent ground to the west is now taken up by parties who intend working it with the greatest expedition possible, and as they have secured the services of Capt. Jas. Thomas (who was for 20 years manager of the old mine) as their managing agent, his thorough knowledge of the run of the lode in the old mine will be of the greatest service. The workings on the lode at the part where it has just been cut so rich are within about 500 yards of the West Langynog boundary, the lode passing direct into the latter set.

BALMYNHAR.—At a meeting of adventurers, held at Falmouth (Mr. Stephen Edmonds in the chair), the accounts to end of May showed a debit balance of 1112s., and a call of 10s. per share was made. The expenses for the past four months have been 1562s., whilst the receipts for tin sold are 1413s., being a loss during that period of 149s. There has been a sale of tin during the present month amounting to 405s., which is not credited, and will be considerably over the month's outlay. The agents presented a very favourable report, in the course of which they stated that by sinking the whim-shaft to a greater depth there would be no difficulty in raising double the amount of tinstuff they have been doing for the last four months, and consequently selling twice the amount of tin they have been returning.

NEW ROSEWARNE.—The engine-shaft will go to work this week; as soon as the shaft is drained to the 55 gns. returns of tin will be made. There is a great demand for the shares, which, however, are unobtainable at the market quotations, as they are all held by private individuals, who are not likely to sell with such immediate prospects of success as the mine presents. During

the last working of the mine the shares, then 1624 in number, were as high as 23s. each, and this, too, when tin was at 50s. per ton, and the company were selling their tin in the stone at a manifest disadvantage. The same tin would now realise 33s. per ton, and as the mine is now in 100 shares only, at 160s. each, the value of the mine would still be 13,000s. less than it was when tin was forced, the 33s. per ton under the present prices. The general opinion is that the mine will before long stand at a much higher value than it did under the former working.

WHEEL ORBORNE has been inspected by Capt. John James, who reports that the lodes are large and well defined, varying from 3 ft. to 8 ft. wide. The formation is a conglomerate slate, bordering on the Godolphin granite hill. The sett is bounded east by the old Godolphin Bridge Mine, and on the south by the present West Godolphin Mine. Considering the geological position of the mine, the large and masterly character of the lodes, and the quantity of tin raised by the shallow workers, together with the productiveness of the present operations, he does not hesitate to state his opinion that with anything like the present price of tin there is every prospect of opening a good and profitable mine.

BLAEN CAELAN.—This mine is opening up well; the working levels are yielding 2 tons and 1½ ton of lead ore, respectively, per fathom; and a level east, 10 fms. deeper, is fast advancing to the dip of the above-named rich ore.

The HOWARD LEAD MINING COMPANY, having got the new lease complete, have commenced their operations by continuing the sinking of the engine-shaft on the course of the lode, and, although only 7 fms. from surface, the lode is impregnated with lead throughout. There is no doubt, we are informed, under the able superintendence of Capt. Williams, this will, in a short period of time, become a profitable undertaking.

WATSON BROTHERS,

MINING AGENTS, STOCK AND SHARE DEALERS, &c.,
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

SATURDAY.—Market rather quiet. South Condurrow, East Van, Roman Gravel, Carn Brea, and Great Vor chiefly in demand. South Condurrow, 9½ to 9¾; East Van, 13 to 13½; Roman Gravel, 18½ to 19½; Carn Brea, 150 to 155; Great Vor, 9½ to 10; New Lovell, 35s. to 40s.; Tankerville, 17 to 17½; Van, 55 to 57; Wheel Lucy, 3½ to 3¾; Pacific, 4 to 4½; Utah, 15 to 16; Eberhardt, 30 to 31.

MONDAY.—Fair demand for South Condurrow, Great Vor, Eberhardt, and Pacific at an advance. East Lovell and East Van weaker. South Condurrow, 9½ to 9¾; Great Vor, 9½ to 10; Eberhardt, 30 to 33; Pacific, 4½ to 4¾; East Lovell, 11½ to 12; East Van, 12½ to 13½; Great Lacey, 16½ to 17; Bog, 2½ to 3; Plympton, 1½ to 2½; Prince of Wales, 18s. to 20s.; South Frances, 49 to 51; Van Consoles, 25s. to 30s.; West Chilverton, 20 to 21; Taquairi, 7s. 6d. to 10s.; Utah, 14½ to 15½.

TUESDAY.—Good demand for Eberhardt, advanced to 37½ buyers. Carn Brea, East Lovell, East Van, and Pacific also enquired for. Eberhardt, 37 to 39; Carn Brea, 150 to 155; East Lovell, 11½ to 12½; East Van, 12½ to 13½; Pacific, 4½ to 4¾; Cook's Kitchen, 27½ to 28½; Marke Valley, 5½ to 6; New Rosewarne, 45 to 55; West Caradon, 30s. to 35s.; Wheel Lucy, 3½ to 3¾; Greenville, 7 to 7½; West Frances, 58 to 60.

WEDNESDAY.—Market quiet; dealers busy with the settlement. Carn Brea, 147½ to 152½; East Lovell, 11½ to 12½; Roman Gravel, 18½ to 19½; East Caradon, 45 to 55; Eberhardt, 30 to 33; Pacific, 4½ to 5; Wheel Lucy, 3½ to 3¾; Tankerville, 17 to 17½; South Condurrow, 9½ to 9¾; East Van, 12½ to 13½.

THURSDAY.—Settling-day. The chief demand has been for Pacific, Eberhardt, New Rosewarne, and Treleigh Wood, at an advance. Carn Brea shares flatter. Pacific, 5 to 5½; Eberhardt, 39 to 41; New Rosewarne, 45 to 55; Treleigh Wood, 37½ to 42½; Carn Brea, 137½ to 142½. East Lovell opened 11½ to 12, and close 15 to 16. Great Vor, 9½ to 10; West Bassett, 4½ to 5; Wheel Lucy, 3½ to 3¾; Greenville, 6½ to 7; Utah, 15 to 16.

FRIDAY.—Market quiet. Greenville, West Caradon, Pacific, New Rosewarne, East Lovell, East Van, and Pacific also enquired for. Carn Brea, East Lovell, and Treleigh Wood, and Eberhardt again in demand. Carn Brea, East Lovell, and Treleigh Wood, offered at lower prices. Greenville, 7 to 7½; West Caradon, 45 to 45½; Pacific, 5 to 5½; New Rosewarne, 50 to 60; Treleigh Wood, 37½ to 42½; Eberhardt, 39½ to 40½; East Van, 12½ to 13½; Cook's Kitchen, 27 to 28; Carn Brea, 130 to 135, ex div.; East Lovell, 13½ to 14½, ex div.; West Frances, 57½ to 60; Wheel Lucy, 3½ to 3¾; Utah, 15 to 16.

FOREIGN MINES.

YUDANAMUTANA (Copper).—The secretary informs us that the whole amount authorised to be raised on mortgage has now been subscribed.

PACIFIC.—H. Prideaux: We have intersected a rich ledge in the north cross-cut 400 ft. level; this ledge is in unbroken ground, and here we have 750 feet of backs, the ledge is 1½ foot thick, and worth \$650 per fathom. This is a very fine ledge, and I think it will produce hundreds of tons of ore. The scopes are still producing rich ore; we expect to be taking out 5 tons per day in a short time.

GOLD MINING COMPANY OF YUBA.—S. Mattingly, Boise City, Idaho, August 6: I arrived here last night, and have met one or two men just down from Atlanta, who tell me that all is going on well there at the Stanley, and no mine could look better as regards the character of its ore; but I deem it useless now to say anything about the mine until I get there myself, and inspect the situation and surroundings, when I will give a detailed account of everything. I visited several mines on my way up here, and whilst in California, and am much pleased that I did so, for all that I saw only convinced me the more fully of the richness and value of our mine (the Stanley). I saw much, too, in the way of recent improvements in the various mills for the working of both gold and silver ore, some of which I shall be able to adapt to great advantage in our works. The prospect of a most abundant crop of all the products of the country and necessities of life is very good here, and will enable us to get all provisions cheap at the mine, or much cheaper than heretofore. I will now conclude by saying the prospects are good, and most flattering for an early success of the Gold Mining Company of Yuba.

[For remainder of Foreign Mines see to-day's Supplement.]

EARTH BORING AUGER.—Mr. W. JILZ, of Hamilton, U.S., has patented an invention which relates to a new and useful improvement in augers for boring wells, whereby it is claimed much valuable time is saved. It consists of the auger of a low radial section of a hollow cylinder flattened out back so as to admit air, and provided with a cutting bit and a circular lip which receives and supports the column of earth when the auger is withdrawn.

Independence Gold Mining Company

(LIMITED).

Registered under the Companies Acts, 1862 and 1867, with limited liability.

CAPITAL £120,000, IN 24,000 SHARES OF £5 EACH, FULLY PAID-UP.

DIRECTORS.

JAMES HALL RENTON, Esq., Muswell-hill, N.
JAMES SHEPHERD, Esq., 24, Queen's Gardens, Hyde Park, W.
JAMES EDMUND SMITH, Esq., 43, Gloucester-place, Portman-square, W.

With power to add to their number.

BANKERS—THE LONDON AND COUNTY BANK, Lombard-street, E.C.

SOLICITORS—Messrs. ELMSLIE, FORSYTH, AND SEDGWICK, 27, Leadenhall-street, E.C.

SECRETARY—MR. DAVID CORNFOOT.

TEMPORARY OFFICES,—18, FINCH LANE, E.C.

AGENTS IN SAN FRANCISCO—Messrs. CROSS AND CO.

This company is formed to purchase and work the mine known as the Independence Gold Quartz Mine, situated in the Sierra Buttes Mountain, Sierra County, California; about 160 miles north-east of San Francisco, 1 mile west of Downsville (the county town of Sierra County), and 32 miles north of Emigrant Gap Station, on the Central Pacific Railway.

The capital of the company is £120,000, in 24,000 shares of £5 each, which will be fully paid up on allotment—£80,000 is the amount to be paid for the purchase of the mine and properties, and the remaining £40,000 will form a working capital for opening out the mine more extensively, and erecting additional stamping power, machinery, and other works necessary for increasing the returns.

The mine has been thoroughly inspected by Capt. N. Bray, of Tregaron, North Wales (who was sent out under special instructions from this country), and Professor Price, of San Francisco, on behalf of the purchasers; and by Colonel Linden and M. E. Derbec, of San Francisco, at the instance of the Bureau of Mines and Mining Statistics of the Pacific States; and their reports, along with maps and plans of the mine, may be seen at the offices of the company.

The mine adjoins the celebrated mine known as Sierra Buttes on the west; the veins of which mine run into the Independence, and form one large, continuous, and unbroken true fissure auriferous quartz vein, varying from 6 to 20 feet in width, with well-defined walls, and dipping to the north at an angle of 45 degrees.

The mining area or claim extends westward from the eastern boundary (which is the western boundary of Sierra Buttes Mine) 5000 feet on the course of the vein—inclusive of all its dips, spurs, and angles—for a width of 250 feet on each side of it.

The mine is worked principally by means of day, or drain levels, which, although extended on the vein only about 1400 feet, have laid open three pay shoots, auriferous chimneys, designated as the east, middle, and west shoots. A large body of auriferous quartz was laid open by these levels, and there yet remains a considerable quantity in reserve; these reserves will be largely augmented by extending the deeper levels, and the existing drain levels further west, the westernmost forebreast of the deepest drain level on the course of the vein, although extended beyond the westernmost pay shoot, being 8 feet wide, with no south or footwall, in full quartz, containing sulphurets, yielding gold worth \$11.25 per ton; whilst other assays made of quartz from the deeper and as well as shallower parts of the mine, which may be taken to fairly represent the average value of the quartz laid open, yield respectively \$12.81, \$13.50, \$12.81, \$18.60, \$18.27, \$15.51 per ton. Assays of the rich streak ore yield \$44 to \$75 per ton, whilst the concentrated sulphurets and tailings yield respectively \$108.52, \$73.88, \$41.68 per ton.

The machinery for working the mine and stamps is driven by water taken from lakes in the mountains, which are supplied from natural springs and the melting of snow;—the supply must, therefore, be perpetual. It is carried by

flumes and ditches first to the mills of the Independence, and thence to the Sierra Buttes Mines; at the latter mine 75 heads of stamps are now being driven by it. Colonel Linden, in his report, states: "This immense water power for driving machinery, and a body of quartz for the full length of the lode—5000 ft.—and 2000 feet deep (to which depth the lode or vein can be drained and worked by tunnels); the large size and permanency of the lode, small cost of mining and milling the ore; combined with other advantages (which he enumerates), all have a tendency to make this property desirable as an investment."

It is submitted that when the Independence Mine is sufficiently laid open, and the requisite machinery erected for crushing 3000 or 4000 tons of quartz per month,—a quantity which in all probability will be easily obtainable from such a large lode—the statements of Captain Bray and Professor Price will be realised.—"That there is every probability of the Independence veining with rich adjoining neighbour, the Sierra Buttes, at no distant period; the lode or vein being large, well-defined, and of great prospective value."

Captain Bray reports the cost of mining and milling at \$6.50 per ton, but if the lode or vein is laid open as proposed, the cost will be reduced to \$4.50 per ton. Colonel Linden states the quartz laid open can be mined and milled at the cost of not exceeding \$3 per ton. The Sierra Buttes mined and milled in the month of June 1870, at a cost of £140; being less than \$5 or £1 per ton, the profit for that month's working being £4500.

Assuming the cost of mining and milling at the higher estimate of Captain Bray—\$6.50 per ton, and the average yield from the quartz and rich sulphurets at only \$13 per ton, a profit of \$6.50, or 26s. per ton on 3000 or 4000 tons per month will yield a profit of £4000 to £5000 per month, or £48,000 or £60,000 per annum, which would yield a dividend of from 40 to 50 per cent. per annum of a capital of £120,000.

The contract for the purchase of the mine and property is dated the 29th of August, 1871, and is made between John Schofield and Robert John Chappell of the one part; and David Cornfoot on behalf of the company of the other part. The Memorandum and Articles of Association, and also the above contract, may be seen at the office of the company, where forms of application for shares may be obtained.

London, September 1st, 1871.

To the Directors of the Independence Gold Mining Company (Limited).
GENTLEMEN,—I hereby agree to subscribe for shares of £5 each, or any less number that may be allotted to me, in the Independence Gold Mining Company (Limited), and to pay up the same in full when required to do so; and I hereby authorise the entry of my name on the register of shareholders of the said company as the proprietor of such shares.

Dated this day of September, 1871.

Shareholder's Signature
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The bit works downward as the auger is revolved, and the earth which is thus undermined is left stationary until the auger and when the rod or auger is full it is raised, an auger, as it does, from a derrick, it is turned in a horizontal position with the open side down, when the earth drops by its own gravity. Water is used during the process of boring with this auger, which greatly diminishes the friction. Air is constantly admitted to the auger by means of a flattened space on the back, which prevents a vacuum being formed to retard or obstruct its withdrawal. With this auger the earth is, it is claimed, readily bored to the depth of a 100 feet or more. The auger is attached to the end of a wooden rod, to which the power is directly applied. There is a band around the semi-cylinder near the top, 2 ft. under, more or less, the object of which is to support the load in the auger (tenacious clay, for instance), and prevent its discharge before the proper time.

THE UTAH MINING INDUSTRY.

The former rural quiet and cleanliness of the Mormon metropolis is sadly disturbed by the irruption of railroads, civilisation, and Gentiles. The hotels and side walks are crowded, saloons, assay offices, and lawyers' signs have sprung up everywhere with magical rapidity; piles of bullion, bars, sacks of ore, and heaps of specimens attract the eye on every side; and plurality of claims has become the leading topic of conversation, instead of the plurality of wives. The Mormons themselves, though not exactly taking the lead in mining matters, are dabbling in them more or less; and if I may judge from some transactions which have come to my knowledge, the Saints have proved themselves as well acquainted with the processes of prospecting, locating, salting, and selling in short, with all the tricks of the trade.

There is perhaps not so much excitement here as there has been in many new mining districts on far less foundation; the cause being that there is little opportunity for persons without capital to engage in profitable enterprises. But the owners of claims hold them at enormous figures—a sure indication that, in a quiet way, the thing is overdone, whatever may be the actual basis.

Many new districts have been organised and prospected within the past year; and some of them are regularly shipping ore. A few mines, and among these especially the celebrated "Emma," have, thus far, furnished the principal basis of accurate business, as well as the stimulus for sanguine operations. I shall try to give another letter to give some account of these. At present, I propose to speak generally of the advantages of this territory as a mining field, under existing circumstances.

First among the advantages of the situation must be reckoned the presence of a large agricultural population in the territory. Utah will not have to import food to supply its mining population; and this secures reasonable prices of supplies, and abundance of labour. The stories told about the cheapness of mining labour here are, however, exaggerated. The Mormons take from one another, it is true, very low wages. The standard is annually fixed, I am informed, by the church authorities; and I believe it is, this year, \$1.60 per day. But they take all they can get from Gentile employers, and, moreover, few of them will work as miners; so the wages of this class of labour are \$2.50 to \$3.50 per day, even in the district nearest to Salt Lake City. The prices paid for hauling ore, on the other hand, are very reasonable, considering the distances. I presume most of the teamsters are Mormons.

Another advantage is the facility of railway transportation for ore and base bullion, from Salt Lake to the east and west. In this respect, it is true, the miners and smelters are dependent upon the railway companies. A few weeks ago all shipments of ore were paralysed by a new and enhanced schedule of freight. Only the Emma Company, which had a contract with the railway at low rates (running till next September, I believe), was able to go on. The rates have since been reduced, though not to the former point. At present, I am told, they are \$18 per ton for ore and \$20 for bullion, from Salt Lake to Omaha. But, aside from these fluctuations, it is evident that without the railroads the mines of Utah would not have been successfully developed. Even for those ores which are smelted in the territory most of the charcoal is brought by rail from the Sierrita Nevada (though a considerable amount is burned in the Wasatch mountains, and in pinon districts further south). The Truckee charcoal can be had here in large quantities at 25 cents per bushel; the Utah charcoal costs 22 cents, but is frequently inferior in quality, while the supply is precarious. This price is far higher than it should be; but the fact is that the charcoal-burners here will abandon the business unless they can make as much money as other folks.

Again, the character of the ores in the Utah district is such that they can be either shipped at once to foreign reduction works, or smelted into argentine ores here, and shipped in that form, or, finally, both reduced and separated in the territory. Some of the mines in the western range furnish milling ores, which are treated by the Washoe system. The majority, however, contain galena, carbonate of lead, with gangue of ferruginous dolomite, and admixtures of antimony and arsenic.

If we enquire, however, how these favourable conditions are utilised, we find much to criticise and lament. The metallurgical industry here is conducted in a sadly careless and haphazard manner. There are now in the territory nineteen or twenty furnaces, mostly small shaft-furnaces. The aggregate production is, however, only about 15 tons of base bullion daily—a proof that the furnaces are run very irregularly, as an inspection of the works also sufficiently shows. Ignorance of the nature and proper treatment of the ores is one reason. The furnaces are run so badly that salamanders are of frequent occurrence. In fact, I do not believe the average campaign exceeds a week.

The Messrs. Robbins, aided by their skillful metallurgists, Mr. Ringer, have erected excellent works for the treatment of galena ores, comprising a large reverberatory roasting furnace, with a smelting-hearth underneath. These works are not yet fairly in operation; and there appears to be some difficulty in obtaining a regular supply of the kind of ore for which they are calculated—not so much because there is a lack of galena among the ores produced, as because the miners do not like to sort them out, and prefer to mix all their ores together, and ship them in that condition. The Robbins works are, moreover, interesting as the only ones, so far as I am aware, employing the coal of the Green River field as fuel. Experience thus far has shown that the coal is not of uniform quality, even with coming, nominally at least, from the same mine. The best ore is probably the moderately good fuel for the reverberatory processes. The shaft-furnaces employ charcoal.

The loss of lead and silver in the shaft-furnaces is very great. It may almost be said that the bullion produced is not richer in silver than the ore. I feel sure that in many cases, moreover, half the lead is lost in the slag, or up the chimney. The astounding ignorance of the smelters may be illustrated by a circumstance which I personally noticed the other day. At one of the principal works large lumps of hematite iron ore and of limestone, which I found were brought there (the hematite) to mix with the galena, and the limestone to "make a slag." As the ores contain plenty of iron, and more than plenty of lime, it may easily be understood that what this addition really made was not a slag, but a salamander.

Yet in spite of these most evident losses, the smelting works in general are reported as paying high prices for ore—prices, in many cases, which would exclude the possibility of profit, even under good management. The only explanation I can offer is, either that the proprietors of the furnaces are losing money without knowing it, or that they may easily occur to persons inexperienced in the smelting business—who they are running the furnaces for a loss, with the intention of selling mines on the strength of alleged favourable results. I fear that in many instances the latter is the true explanation. Certain it is—if anything in metallurgy or mathematics is certain—that the smelting-works now in operation cannot be legitimately making money operated as they are, and paying what they do for ores.

As for the mines, the principal ones are deposits in limestone. The Emma, however, resembles in character the deposits at Eureka, Nevada, though less extensively exposed. All the mines appear to be worked in such a manner that it is impossible to say how long they will continue to be productive, there being little or no ground opened in advance of actual extraction.

The blighting curse of litigation rests upon almost every good mine in the older districts. The mining laws are vague and bad, and the territory is infested with unscrupulous jumpers and black-mailers. There are at least three parties fighting over the Emma Mine. One of the claimants, Mr. James Lyon, alleges that he was an original locator, and moreover, if that plea isn't good, then he has bought a third title, which covers the whole thing. There is a San Francisco company, boasting of large capital and numerous outside titles, which lay over everything. Meanwhile, the Emma Company, now in possession, is taking out ore as fast as possible, and making a good deal of money, though not nearly so much as popular rumour declares. But I will say more of this mine in another letter. The Lyons suit is to come on in October before Judge Curtis, of Boston, as sole referee. His appointment seems to satisfy both parties. Certainly he is thoroughly acquainted with law in general; and probably he is ignorant of the abominations of American local mining laws.

The Emma is a very interesting case. Lawyers are springing up all over the territory; and we shall have a new crop of mischief from the idle idleness and neglect of the Federal Government with regard to the mining law. For my part, I am more and more thoroughly convinced that the men to whom the United States is virtually giving away its mineral land are not the proper persons to regulate the tenure of their titles. One would scarcely say to his best friend, "Here, take my property on your own terms!" and the penniless speculators in mining claims can least of all be trusted to make the laws defining their own rights. In my opinion, the United States law, which declares all citizens entitled to mine upon the public domain, gives them no right to any dig-in-the-manner titles. The object of the law is to develop the mines, not to help a few individuals lock them up, and demand high prices for them. A discoverer has the right to occupy and improve; this is properly his only right; it is all he can sell; and until the mine is purchased of the United States nobody can have any rights in the premises which abandonment or neglect to improve does not defeat. Here in Utah there were many mines discovered some years ago, and abandoned. Now a second crop of discoverers has come; and the old ones have returned, anxious to claim their rights." R. W. R.

REVERBERATORY FURNACES.—The invention of Mr. J. BROMILOV, of Liverpool, consists essentially in constructing reverberatory furnaces with a hollow crown, and in heating the air therein, such air being allowed to meet the products of combustion from a fire at one end of the furnace, and cause intense combustion over the hearth. It is preferred to admit the air to the crown through chambers, which serve alternately as waste products, escape-passages, and air-entrance passages.

ORE-WASHING MACHINES.—By the invention of Mr. H. BRADFORD, Reading, U.S., the central shaft is dispensed with, giving an unobstructed opening in a revolving cylinder for receiving and delivering the ores. The inventor uses a peculiar perforated hopper, and provides for delivering the water and rapidly accumulating in such a manner that the hopper cylinder will be entirely emptied by the contents running off at the point of delivery when the apparatus is stopped, thereby preventing injury in frosty weather by the freezing of water or muddy sediment.

ECONOMISING FUELS.—The improvements patented by Mr. A. BELL, Henderson, consist of a tube with a spiral blade for feeding the fuel to the furnace. In the centre of spiral coil is an upright shaft, supported in a footstep at the bottom end, and at the top end in a bearing, rotary motion being given by worm and wheel gear from a horizontal shaft above.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—Wm. Phillips, Aug. 31: There is no change to remark upon since the report for the meeting. We are driving by the side of the lode in most of the ends at present, and the different stopes continue to look well.

BLAEN CAELAN.—Thomas Kemp, Aug. 30: I went over to this mine yesterday, and after careful examination beg to report as follows:—The lode in the 23rd, west of shaft, is 5 ft. wide; on the north or hanging wall there is 18 in. of solid muddle. This I find by assay yields nearly 10 ozs. of silver to the ton of ore, and it is my belief that this deposit will verify the old adage again, "that muddle is generally found to be riding a good horse," and that we shall presently have equally good lead ore on this side of the shaft. The other portion of the lode is friable spar, intermixed with lead, worth of the latter about 10 cwt. per fathom. East of shaft this lode is composed of killas and spar, spotted with lead ore; this end is being pushed on with all speed to get under the rich run of ore we have in the 10 and 11th adit level above it, and about 14 fms. of ground have yet to be opened to reach that point. Every endeavor will be made to accomplish that by our half-yearly meeting in October. The stopes in back of the 10, east of shaft, has much improved since my last visit, and is now yielding 2 tons of lead ore per fathom. The two stopes over the back of the adit, east of shaft, have also improved, and are now worth on an average 1½ ton of lead ore per fathom. I venture to congratulate you on our prospects here, which are, I consider, highly favourable.

BOG.—W. Nancarrow, J. Lean, Aug. 30: We have no material change to notice since last week's report. The several points of operations are progressing satisfactorily. We hope to give particulars next week.

BRONFLOYD.—Thomas Kemp, Aug. 31: No 3 Shaft—North Lode: This shaft is now in regular course of sinking under the No. 4, on the south wall of this lode, by nine men, on a bargain (266l.), to put it down to the 100; the ground is favourable for progress. The lode in the 84 end, west of winze, is producing fully 2½ tons of silver-lead ore per fathom. All the other bargains in the mine are without alteration in value. Machinery in good order.

BWADRAIN CONSOLS.—R. Northey, Aug. 26: I do not see anything new in any of the drives or stopes since I last reported. We are getting on well in timbering up the collar, the new engine-shaft, and hope to get it completed by the end of next week. All the machinery is working well.

BWLCH CONSOLS.—R. Northey, Aug. 28: The lode in the rise in the back of the 70 is 3 ft. wide—good saving work. The stopes in the back of the 70 are worth on an average 16 cwt. per fathom. The stopes in the back of the 60 are worth 20 cwt. per fathom. The lode in the 50 is daily improving, producing splendid stones of lead ore. The stopes in the back of the 50 are worth 17 cwt. per fathom. North Lode: The lode in the 40 is 2 ft. wide, composed of killas, quartz, and spots of lead ore. All the other points in the mine are without change.

CAE GYNON.—T. Hodge, Aug. 13: In the 60 north cross-cut fair progress is being made. North Lode: In the 50 west end, on the north part, the lode has improved, worth 8 cwt. of lead per fathom. The winze sinking below this level is worth 10 cwt. of lead per fathom. In the 40 west end we have met with a vugh in the lode, which has lessened its value; however, the lode looks strong, and may improve again at any time. The stopes in bottom of this level are turning out much the same as usual. South Lode: The 40 west end continues to yield saving work for blende and lead. In the 10 south cross-cut I think that we are nearing the lode; the ground appears to be changing, indicating a lode or branch being near at hand.

CAPPAGH.—W. Thomas, Aug. 26: The skip-shaft is sunk 1 ft. 5 in. 10 in. under the 104 level; in the last sinking the lode was not taken down. The 104 end is driven west of skip-shaft 4 fms. 2 ft. 10 in.; set for the month to six men, at 7½ lbs. per fathom; the part of the lode on which the end is being driven is worth from 7½ to 8½ lbs. per fathom. The whole of the lode cannot be carried all the way down to the 104 level, as the lode is not so good as the 104 level. 0 ft. 2 in. set for the month to six men, at 7½ lbs. per fathom; the lode is worth about 10½ lbs. per fathom. Loden's winze is sunk under the 94 fm. level 9 fms. 2 ft. 7 in.; set to four men at 9½ lbs. per fathom—extent 3 ft. 5 in. to the 104 fm. level; the part of the lode which we are sinking is worth about 10½ lbs. per fathom, but the whole width and value of the lode will not be ascertained until the winze is holed to the 104 fm. level. We calculate that by pushing the 104 end west with six men to hole to Loden's winze in two months, we shall then have a block of ore ground to stop to 10 fathoms long and 10 ft. high. We have opened the lode west of skip-shaft 6 ft. wide, and the lode is worth about 10½ lbs. per fathom; however, we shall carry all the lode; from Killy's winze to engine-shaft is 25 fathoms, and in sinking for fork at the engine-shaft we found at the north side a strong ore lode, and we are now pushing the 104 end east with six men in order to open this piece of ore ground, 25 fathoms long and 10 fathoms high, for new stopes; and as far as we can judge from present appearances of the lode at different points the ground, when opened east and west, will produce considerable quantities of ore, and make profitable returns.

CASTLE AN DINAS.—T. Parkyn, Aug. 31: All our operations are going on well. The stamps are kept fully employed day and night, and the tin dust is coming out very satisfactorily. The new shaft is being sunk in a good channel of tin-bearing clay, and we are laying open large quantities of rich tin ground to take away. The machinery is looking well—in fact, all things are going on very favourably for large profits.

CASTLE GATE.—T. Parkyn, Sept. 1: Brenton's lode is 2 ft. wide, and contains good work for tin; I have let to the men to drive still further south to intersect the south lode; the ground is very congenial for tin, and from the old workings at the surface I feel confident these south lodes will be found rich in tin.

CATHEDRAL.—J. Michell, Aug. 31: The lode in Colonel's engine-shaft, sinking below the adit level, is daily improving, and I firmly believe before we sink 10 fathoms deeper we shall have a good course of copper ore.—Howston's Great Tin Lode: We have commenced to drive east of Howston's shaft, at the adit level, on this lode, which is from 8 to 9 feet wide, and producing fine lumps of tin. Very good progress is being made in clearing and securing the adit level going towards Doctor's shaft; when we complete the adit level shall commence to sink the same Doctor's shaft, on a lode worth from 15 to 20½ lbs. per fathom.

CHIVERTON COLO.—G. E. Traynor, Aug. 29: Harrie's engine-shaft is sunk 4 fathoms below the adit level, and the ground still continues to be favourable for prospecting. At the 116, driving west on the caunter, the lode is 12 in. wide, principally composed of flookan, quartz, and at times producing good stones of lead. In the 105, driving west of the cross-cut, the lode is 3 feet wide, composed of flookan, friable quartz, and a little lead, with great increase of water; this end is approaching our run of lead ground; east at this level the lode is 2 feet wide, with a very promising appearance. In the 95 west the lode is still disordered by the slide; the ground at this point is exceedingly heavy and troublesome to keep abreast. In the back of this level the lode is 3 feet wide, and worth 6 cwt. of lead per fathom. We have three stopes in the back of this level, which are worth on an average about 15 cwt. of lead per fm. I am pleased to say that everything is going on very satisfactorily, and the lead is coming up very well for the next sampling.

CONNORREE.—William Jones: Setting Report for September: The 18 fm. level, middle and south stopes, on yellow ore, to stopes by four men, at 40s. per fathom. The 18 and 25, Field's shaft, on yellow ore, to stopes by 10 men, at 40s. per fathom. There are good stopes of ore now open in the 18. We have in the 25, Barry's shaft, on yellow ore, to stopes by seven men, at 40s. per fathom. The 25, Barry's shaft, on grey copper ore, to drive the western level, by four men, at 40s. We are also putting down the skip-roads by the six shaftmen from the 25 to the 35; this work we expect to complete within a week. The 35, east of engine-shaft, on yellow ore, to stopes by 10 men, at 40s. per fathom; these stopes are yielding good profitable ore. The 45 to drive on the lode east of engine-shaft, by four men, at 30s. per fathom; we have here an ore of rich appearance, and the lode has a shaly increase in breadth, being now in the ore 3 feet wide. In the 55 we continue the western driving, by four shaftmen, and carry our tramway as we proceed; this will, after a little time, make a valuable piece of ground for stoping.—Kilmacoe Silver Blende Ore: To stopes under the 35 by 12 men, at 10s. per ton. The men are turning out a large quantity of ore from this new stopes.

CRENER AND WHEAL ABRAHAM UNITED.—Wm. Killo, Wm. Thomas, Aug. 28: Shir's Engine-Shaft: The stopmen will finish cutting the bob-plat this week, after which they will begin to put in the bob-rods, &c. We set the 205 to drive west by six men, the month, at 6½ lbs. per fathom; the lode is 1½ ft. wide, and worth from 10½ to 15½ lbs. per fathom.—Crewer Shaft: The 160 to drive east by four men, the month, at 5½ lbs. per fathom; the lode is 2 feet wide, and unproductive. The 130 fm. level end to drive east by four men, the month, at 6½ lbs. per fathom; the lode is 2 feet wide, having a kindly appearance for improvement. To rise in the back of the 130 by four men, the month, at 3½ lbs. per fathom; the lode is from 2 to 3 feet wide, worth from 10½ to 15½ lbs. per fathom for tin and copper.—St. George's Shaft: To sink below the 190 by six men, the month, at 7½ lbs. per fathom; the lode is 3 feet wide, producing good stones of copper ore. The 190 fm. level end to drive west by four men, the month, at 5½ lbs. per fathom; the lode is 3 feet wide, producing a little copper and tin.—Woolf's Shaft: The 120 fm. level cross-cut to drive south by four men, the month, at 7½ lbs. per fm.; we shall have several fathoms to drive in this direction before we may expect to reach the lode.—Vivian's Shaft: The 200 fm. level end to drive east by six men, the month, at 7½ lbs. per fathom; the lode is 3 feet wide, but poor.—Pelly's Engine-Shaft: To sink below the 220 by eight men and four boys, the month, at 30s. per fathom; the lode is large, which we shall take down to ascertain its size and value. The 220 fm. level end to drive east by six men, the month, at 10½ lbs. per fathom; the lode is large, and we shall have it taken down to ascertain its size and value. The 220 to drive west by four men, the month, at 7½ lbs. per fathom; the lode is 3 feet wide, producing good stones of tin and copper ore, having a kindly appearance. The 210 fm. level end to drive east by four men, the month, at 9½ lbs. per fathom; the lode is 2 feet wide, but unproductive. The 210 fm. level end to drive west by four men, the month, at 6½ lbs. per fathom; the lode is 1½ ft. wide, producing good stones of copper ore. The 190 fm. level cross-cut to drive north by four men, the month, at 5½ lbs. per fathom.—Blewitt's Shaft: A rise in the back of the 200 west by four men, the month, at 4½ lbs. per fathom; the lode is 6 feet wide, producing copper ore to dress. The 190 fm. level cross-cut south is suspended for the time, believing we are gone far enough in that direction until we sink a winze in the bottom of the 180 fm. level in the course of copper ore now standing in the bottom of the level referred to. The 180 to drive west by four men, the month, at 6½ lbs. per fathom; the lode is 3 feet wide; our object here is to get under Richard's shaft, in order to bring down the shaft as quickly as possible. The 170 fm. level end

to drive east on the south lode by four men, the month, at 7½ lbs. per fathom, the lode is 2 feet wide, and likely to improve.—Richards's Shaft: The 170 fm. level cross-cut to drive south by six men, the month, at 14½ lbs. per fathom; there is a large stream of water coming from this direction, which indicates a lode below of the 170 fm. level. The 95 fm. level cross-cut to drive south by three men and three boys, at 24½ lbs. per fathom, 1 fm. or thereabouts; our object here is to cut the old lode and communicate with Yates's shaft. The 70 fathom level end to drive west of Gald's shaft, in the old lode, by two men and two boys, the month, at 4½ lbs. per fathom; the lode is 1 foot wide. The 60 fathom level cross-cut to drive north by four men, the month, at 7½ lbs. per fathom; we expected to have met with the lode ore this, but the lode must have taken another direction than we calculated on. Woolf's shaft is set to six men to put down a single skip-rod, and to divide and case the same, at 6s. 6d. per fathom, from surface 50 fms., or the month.—Tribute Department: We set 15 pitches to 25 men at tributes averaging 6s. 8d. in 17.

CWM ERFIN.—Aug. 29: In stoping below the 45, between Taylor's and the engine-shaft, we find the ore to hold down about 12 ft., where it is cut out by the two walls coming together like the point of a wedge; we have opened out each side of the lode, but there is no ore to be seen. We have about 3 fms. in length more to excavate for this depth, when this stopes will be exhausted; its present value is from 10 to 12 cwt. of lead per fathom. The 45, going west, has been suspended, and a rise has been set to two men, at 6½ lbs. per fathom; this end is now 40 fms. west of Taylor's shaft, and the lode has got very small and poor, and the air bad. It is our intention to ventilate the level above by a new rise, and then to drive only one level instead of two. We are still driving the 45 on the caunter lode, there being still stones of muddle, blende, and spots of lead ore found at intervals. The lode in the stopes over the back of the 45, 30 fms. east of the drawing-shaft, is 18 in. wide, worth from 6 to 8 cwt. of lead ore per fathom. The lode in the 32, going west of Taylor's shaft, looks more promising than for some time; this level is 20 fms. behind the 45, and thus the reason for our stopping it for the time. During the last fortnight the lode in this end (the 32) has varied from 2 to 15 in. wide, containing killas and carbonate of lime, strongly impregnated with silver-lead ore, specimens of which we have now before the office door. This level is being driven forward into a rising hill, and by a full pair of men. We have two men trying on a branch taking off in the south in Taylor's drift, about 20 fms. west of the ladder-winze. This branch contains a little silver-lead ore, and may be found to improve. The stopes in the bottom of the deep adit level has been taken on tribute, at 7½ lbs. per ton of 21 cwt. We shall sample 20 tons of silver-lead ore from this mine on Tuesday next, September 5.

NEWALLS.—Thos. Gregory, Aug. 31: The branches in the 80, east of Brenton's shaft, are worth 10½ lbs. per fathom. In the 40 west the branches are worth 11½ lbs. per fathom, and improving. The branches in the 60 west, on the north part, are worth 7½ lbs. per fathom. In the 60 cross-cut south, some distance from the western end, some good branches of tin are being cut into so far as laid open, worth 10½ lbs. per fathom; this appears to be a discovery of importance. Other cross-cuts will be put out south at the 70 and 50 fathom. The branches in the 30, west of Brenton's, are worth 9½ lbs. There is no other change of importance to report on at present.

SKINNER'S SHAFT.—R. Southey, Aug. 30: Since our meeting on Wednesday the 6th inst., the stopes in the 40 have much improved. Yesterday we hauled a pile of silver-lead ore to the surface, the richest yet seen since the mine commenced to work. We are also glad to state that the character of the lode in the 52 is everything that could be wished for the production of the said mineral, and we feel every confidence that in a few fathoms more driving a good lode will be met with.

EAST DARREN.—Aug. 29: The lode in the 116, east of Taylor's shaft, is 1½ yard wide, yielding 5 cwt. of lead ore per fathom. In this 104 east the lode has been improved for lead ore, now producing 1 ton per fathom. The lode in the 104 are producing 1 ton of ore per fathom each. In the 92 east the lode is 4 ft. wide, composed of clay-slate, carbonate of lime, and small strings of lead ore at times. The stopes in the back of this level will produce 22 cwt. of lead ore per fathom. The lode in the 80 is producing 18 cwt. of ore per fm. The ground in Skinner's shaft is favourable for sinking. In the engine-shaft, at Blawcwm, the ground is composed of clay-slate; this point will be carried down as fast as possible to reach the lode in the 60 cross-cut north. The lode in the 60 cross-cut north is 2 cwt. of lead ore per fathom. In the 40 cross-cut north, at a few Pools, the ground is favourable for driving. The tribute pitches continue to yield their usual quantities of ore.

EAST RHYDTALOG.—J. Dunkin, August 30: The deep level on Rhydtalog engine lode is the same as for some time past, very regular, and producing good gossan. In the deep level, on new lode, the lode is large—a very fine looking lode, and producing good stones of gossan, and carbonate of lime; I believe this will soon be producing lead.

EAST TERRAS (Tin).—George Henwood, Aug. 23: I have just been over the whole of this set with the agent, Capt. James. I find the extent has been increased, with the exception of a few yards which will be done in the course of this week. Two new lodes, in addition to those already laid down, have been discovered, one of which produces good stones of ore, but as a matter of course, it being only a surface trial, no definite result can be expected. However, sufficient has been done to determine future action, and, according to your instructions, we have decided on the points for immediately commencing a deep adit to develop these numerous lodes. The ground rises so fast that a depth of 40 fms. is attainable. This adit is to be driven with all possible speed, and the lode in the 17, level, this is now suspended, water having prevented further progress; this has also been much increased by the late heavy rains, so that it was impossible to go down and examine the lode; the large barrow is quite sufficient evidence of the reality. I next tested the stones from the lode lately discovered, and found them about one-third as productive as that before quoted. Previous reports and plans have so simplified and explained the position, that I deem further exposition needless, except to remark that my opinion, before expressed and fully confirmed, I have urged upon your agent of devoting all his energies and attention to the development of the lode, and that sufficient has been done for discovery, it is now necessary to accomplish this, when you will be enabled to develop and secure the valuable contents of these numerous and proved to be rich lodes.

EAST TERRAS.—James Harris-James, Aug. 31: The prospective work is completed, and we are now able to decide as to the position of the great adit; numerous lodes have been laid open, and trial shafts have been sunk on the course of these lodes—indeed, the lodes here have been tested in every possible manner, and they have been proved to contain tin in sufficient quantities to pay; and as the depth has been attained they have been found in places rich in tin, and rich in the level. As sufficient has been done for discovery, it is now necessary to accomplish this, when you will be enabled to develop and secure the valuable contents of these numerous and proved to be rich lodes.

EAST WHEAL BASSETT.—John Lean, Aug. 30: The 130 fm. level cross-cut, driving north to the tin lode, will hit the elvans, and very rich ore. The 110, going west from Hodge's cross-cut, on the north part of the copper lode, is about 4 fms. of its intersection with the north lode, worth about 5½ lbs. per fm. for tin. The 110 east, on the same, is producing saving work for tin. A stopes in the bottom of the 110, on the north lode, is worth for tin 8½ lbs. per fathom. The 100, west from Michell's cross-cut, on the north part of the copper lode, is worth for tin 12½ lbs. per fathom. The 90, east from Williams's cross-cut, on the same lode as the 100, is worth for tin 10½ lbs. per fathom. We have commenced a cross-cut north at the 80 to intersect the lode referred to in the 90 and 100. The 80 west is producing ¾ ton of copper ore per fathom.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Aug. 26: The following is our setting report for September:—The 130 fm. level cross-cut to drive north, by six men, at 10½ lbs. per fathom; here we hope to make good progress in rising. The 95 east by four men, at 9½ lbs. per fathom; lode 15 in. wide, with stones of ore. The 85 east by four men, at 10½ lbs. per fathom; here the lode is improving, worth 1 ton of copper ore per fathom. The 75 east by four men, at 5½ lbs. per fathom, lode worth 2½ tons of copper ore per fathom, and very kindly in appearance. The winze in the 75 by four men, at 6½ lbs. per fathom; lode for 10 ft. long worth 8 tons of copper ore per fathom, with good tin on the south side, a very promising lode. The stopes above this level by four men, at 4½ lbs. per fathom; lode worth 2½ tons of copper ore per fathom. The 65 east by four men, at 6½ lbs. per fathom; lode worth 2½ tons of copper ore per fathom. The stopes above this level east by six men, at 50s. per fathom; lode worth 2½ tons of copper ore per fathom. The stopes above the 65 west by four men, at 50s. per fathom; lode worth 2½ tons of copper ore per fathom. We have also set the tribute pitches at about the same tribute.

EAST WHEAL SETON.—J. Vivian and Son, H. Arthur, Aug. 31: Western Shaft (Cartwright's): This shaft is now 3½ fms. below the 34 fm. level, where the lode is 4 feet wide, containing muddle, blende, and copper, and improving with increasing depth. In the sink below the 34 fm. level, west of this shaft, the lode continues to yield 3 tons of copper ore per fathom. There are tributes in this part of the mine, in the backs of the 34 and 27 fm. levels, yielding an average of about 2 tons of copper ore per fathom.—Engine-Shaft (Basset): This shaft is now 4 fms. below the 46 fm. level, where the lode is about 5 ft. wide. By pushing down this shaft as rapidly as possible we shall in all probability make a good discovery ere long, as we shall be approaching the point to which we have from the commencement of the mine directed the attention of the shareholders, as possessing all the conditions for large formations of copper—the junction of the lode and elvan course. It has been in the elvan course, and proximity to them, that the largest and richest deposits of copper ore have been met with in the great and highly profitable mines of this locality. We are

* With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: Manufacturing Industry of Scotland; Mining in Lincoln; Hematite Pig-Iron Manufacture; Royal School of Mines (L. Gordon); Utilisation of Waste Coal; Coal Supply; Mining in Prussia; American Mining "Experts," the value of their Opinion; Mining in White Pine, Nevada; Emigration and Mining (R. T. Drednick); Miners' Wages (K. Symon); South Condor Mine (J. R. Pike); Chilverton Moor Mine, and its Management (Ward and Littlewood); South Darren and Great North Laxey Mines; Mining in Cardiganshire—Bronfloyd and Darren United; Cefn Conda Lead Mining Company (T. R. Comyn); Virtuoso Lady, King, and Queen Mines; South Aurora Mine—Iron and Steel Institute, Visit to South Staffordshire and Shropshire—Foreign Mining and Metallurgy—Foreign Mines Reports, &c.

REPRESENTATION OF TRURO.—It is understood that Mr. George Batters, who has been for so many years deservedly known and respected in mining circles, is about to contest Truro in the Liberal-Conservative interest. His long and varied experience in the commercial world and extensive mining connections render Mr. Batters an eminently eligible representative for such a mining centre as Truro; his matured practical mind, and intimate acquaintance with all departments of mining, are qualifications which would make him a desirable authority in the Houses of Parliament upon many questions of vital importance to all associated with the mineral interests of the country.

ASSHETON.—The north and south lode has been intersected in the 20 fathom level in two places, and 100 fathoms apart in both places; the lode is very wide, and good throughout. They will leave backs for 100 fathoms long and 20 fathoms high.

SOUTH LISBURN.—This mine is situated about one mile from the Lisburn Mines, which have paid in profits over 300,000*l.*, and is on the Esgrig Mwyn lode, which has yielded enormous profits. The mine is 50 fathoms deep, and the lodes are large and ore throughout. The machinery will be at work in about two months, when paying returns of silver, lead, and blende will be immediately made. Throughout the year there is an ample supply of water for pumping and dressing. The length of the ground on the course of the lodes is about 100 fathoms and the extent of the set is 150 acres. There are 12,000 shares of 1*l.* each, of which 12*s.* 6*d.* per share has been called up, and it is estimated that 1*s.* per share more will be all that is necessary to place the mine in a profitable position. Some of the leading members of the Stock Exchange are on the direction. The shares are quoted at $\frac{1}{2}$ to $\frac{3}{4}$ prem.

EAST DOLWEN.—On March 18 last the starting of this mine was reported amongst our mining intelligence, announcing that a cross-cut adit level, to be carried 7 feet high by 5 feet wide, was to be extended 30 fathoms into the mountain in a direct line south, nearly dead-level from a point about 10 fathoms above the My-herin river, to cut the Dolwen lode, and that such work had been set to six good men, at 150*l.* in one bargain—the men to lay the rails as they proceeded, and tram their own stuff. The work went on with good speed, and about June the forebore of the level came into highly mineralised ground, carrying spots of lead ore of some promising character, but coupled with the influence of the rich discoveries repeatedly made in each of the adjoining mines to the west—Dolwen (Messrs. Balcombe and Son), Ty-gwyn (Messrs. John Taylor and Son), Bodell (Messrs. Girdwood and Co.), the agent in the meanwhile put on other men to open cross-cut pits from the surface in this new set (East Dolwen) to prove the exact run of the Dolwen and Bodell lodes throughout it and the whole length of this range of mines. The result of these trials was reported in our columns of July 1. Last week the agents (Capt. Davis) report announced the completion of the 30-fathoms bargain, together with the setting of an additional 5 fathom stent, or cut the lode at 6*l.* per fathom, and now have the pleasure of adding that good branches of lead ore, nearly 2 in. wide, solid, were on Wednesday evening last cut in the end of the adit cross-cut dipping south with the lode. We may take this opportunity of congratulating the East Dolwen Company on this success, and the additional proof it conveys of the value of Mr. Balcombe's habit of setting low bargains whenever they can be made with security to the adventure and fairness to the miner; such bargains during his long experience—as reported to the July meeting of Bronfloyd "have resulted in a saving of money, and, what is of times of more value, a great saving of time," and in the present case their efficiency in producing effect is palpable enough; a long length of 31 fathoms of level has been driven in about five months resulting in a good and most encouraging discovery, whilst the men, working loyally and in good spirits, have opened the said adit 8 ft. high instead of 7 ft. have earned fair and remunerative wages, to say nothing of the pleasure which must to them result of having by their energy contributed to the speedy development of the undertaking.

MINING IN MONTGOMERYSHIRE.—The attention of capitalists to the district in which that celebrated old lead mine Llanygrog is situated seems to be fast increasing, and mine after mine is being set to work, among which may be mentioned Cwmorog Lead Mine, situated on the same estate as the old mine mentioned above, and the results here are of a very favourable character, as they have abundance of lead in sight. The lode at only 15 fms. from surface was cut very rich, producing at that shallow depth from 5 to 6 tons of rich silver-lead per fathom. Several other very fine lodes have been discovered in the same set, highly impregnated with lead ore throughout at the surface. This mine can be worked for many years without the aid of machinery, except for dressing purposes, as the deep adit level will intersect the lodes at 150 fms. in depth, laying open ore ground sufficient to give large profits for many years to come. The important discoveries made in the Cwmorog Mines have drawn the attention of practical mining men to this district, and several promising young mines are now being opened up, holding out great promise for the future, among which may be mentioned Glanhafon, Nant-y-Blaidd, &c. The works in the latter are now being pushed on vigorously, the lode at a few fathoms from surface being several feet wide, and spotted with lead throughout. A deep adit level now being brought up will intersect this lode 18 fms. deeper, when, no doubt, lead in abundance will be discovered—in fact, there is now a pile of lead ore broken from the shallow level of the Cwmorog Mines, and the prospect is very bright. One of the most important properties lately secured in this district is now about to be worked, in the West Llanygrog Mine. There are few mines set to work under such favourable auspices as this one, the set adjoining the Old Llanygrog Mine on the west, and having the celebrated lode of the latter mine passing direct into the set. This lode has been worked on for 150 yards long, having a course of solid lead ore for that length 5 yards wide, and holding down equally as rich over 150 ft. in depth. The sales of ore from this mine during the present working amount to the enormous sum of 4,775,000*l.*, giving immense profits to the proprietors, after paying to the Earl of Powis's family in dues 398,000*l.* At the present time they are sinking a new shaft, and erecting a powerful steam engine thereon, to facilitate the raising of the ore at the old mine. This shaft is only 600 fms. from the boundary of West Llanygrog, and the lode is very rich at this point, being 7 ft. wide, carrying lead ore for the whole width of the lode, with a leader of solid ore 2 ft. wide. West Llanygrog Mine can be worked for years without the aid of machinery, except for dressing purposes, as the deep adit level, now being pushed on vigorously, will cut the lode at 50 fms. from surface, and there is no doubt from the rich appearance of the lode in the old mine as it approaches the boundary of the set but what the adventurers will meet with speedy and profitable results.

NORTH LEVANT (St. Just).—This "important and profitable mine," as the Messrs. Higgs justly denominate it in the short notice that accompanies the declaration of its sixth half-year dividend, is now making excellent returns to its shareholders. The present is the second successive dividend at the rate of 1*s.* per share, and the mine really earned a dividend of 2*s.*, for 22*l.* carried forward, and 200*l.* has been paid on account of contract for surface tramway. An additional 16 heads of stamps are to be put up, and everything about the mine promises more tin, and yet increasing dividends. Specimens of the ore may be seen, we hear, at the offices of Mr. Y. Christian, 11, Royal Exchange.

EBERHARDT AND AURORA.—In consequence of the directors having received on Tuesday a letter from Mr. T. Philpotts, their agent at Shermantown, informing them that he had made a rich strike of ore, assaying from \$1500 to \$3000 per ton, they immediately telegraphed to him to ascertain whether there was any permanence in the strike, and received on Thursday the following reply (three weeks later than the letter):—"Ladies Chamber North Aurora, excellent promises to be permanent. Mines excellent order. Clean up first."

AUSTRALIAN AND NEW ZEALAND DIVIDEND MINES INVESTMENT COMPANY.—The applications for shares in the No. 1 and No. 2 series having been considerably in excess of the number to allot, has induced the directors of this company to issue the No. 3 series, and we hear the share list is fast filling up, and will be shortly closed. Investments made in this way by Mr. Dicker privately, are giving returns of from 50 to 60 per cent., taking an average of mines. The Thames Investment Company, formed after a similar plan, has returned its original capital back many times over.

BIRDSEYE CREEK.—The superintendent is taking advantage of the exceptionally dry season to enlarge the company's ditch to a capacity of 1200 inches, so as to be ready for the autumn rains, which usually commence about the middle of end of November. It is confidently anticipated that on the resumption of washing, and completion of the enlargement, the net monthly profits will not be much, if any, short of 2000*l.* per month. The best chance of the future prospects of the property is that the vendor, who took a large amount of the purchase in shares, has not, and will not, sell a share until the whole property is in full work, knowing, as he does, that it is capable of yielding regular dividends of from 25 to 40 per cent. as soon as the autumn rains commence. Among the known ones the Birdseye is considered one of the safest foreign mines held by English hands.

CUTTING COAL.—By the invention of Mr. W. WILLIAMS, Liverpool, a frame in a sliding bed, operates on a screw block, so that the position of the cutting tool may be from time to time adjusted.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending August 27 were 10,791*l.* 7*s.* 9*d.*

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 1, 1871.

COPPER.		IRON.	
Best selected.	Per ton.	Best selected.	Per ton.
Tough cake and tile.	76 0 0	Do., in London.	75 0 0
Sheathing & sheets.	74 0 0	Do., to arrive.	70 0 0
Boils.	79 0 0	Nail rods.	8 0 0
Bottoms.	80 0 0	Do., in London.	8 15 0
Old.	60 0 0	Do., ditto.	8 15 0
Burra Burra.	76 0 0	Do., at works.	8 0 0
Wire.	0 0 9 1/2-10 <i>d.</i>	Hoops.	8 12 6
Tubes.	0 0 10 1/2-10 <i>d.</i>	Sheets, single.	10 5 0
BRASS.		LEAD.	
Per lb.	Per ton.	Best selected.	Per ton.
Sheets.	8 <i>d.</i> 3/4-8 <i>d.</i>	English Pig.	18 0 0
Wire.	8 <i>d.</i> 3/4-8 <i>d.</i>	Do., in London.	18 0 0
Tubes.	8 <i>d.</i> 3/4-8 <i>d.</i>	Do., at works.	17 6 0
Yellow Metal Sheathing.	6 1/2-7 1/4 <i>d.</i>	Do., mch. Tyneor.	7 10 0
Sheets.	6 1/2-7 1/4 <i>d.</i>	Do., railway, in Wales.	6 15 0
SILVER.		STEEL.	
Per ton.	Per ton.	Best selected.	Per ton.
Foreign on the spot.	18 0 0	Swed., in kegs (rolled).	12 5 0
to arrive.	18 0 0	Do., (hammered).	13 0 0
ZINC.		TIN.	
Per ton.	Per ton.	Best selected.	Per ton.
In sheets.	24 10 0	English.	13 0 0
QUICKSILVER (p.bot.).	15 0 0	Do., refined.	135 0 0
TIN-PLATES.		SILVER.	
Per box.	Per box.	Best selected.	Per box.
IC Charcoal, 1st qual.	1 9 6	Do., refined.	135 0 0
IC Ditto, 1st qual.	1 16 0	Do., refined.	135 0 0
IC Ditto, 2d qual.	1 7 6	Do., refined.	135 0 0
IC Ditto, 3d qual.	1 5 0	Do., refined.	135 0 0
IC Coke.	1 5 0	Do., refined.	135 0 0
IC Ditto.	1 11 0	Do., refined.	135 0 0
IC Canadaplates, p. ton.	13 10 0	Do., refined.	135 0 0
Ditto, at works.	13 10 0	Do., refined.	135 0 0

* At the works, 1*s.* to 1*s.* 6*d.* per box less. † Add 6*s.* for each x. Terne-plates 2*s.* per box below tin-plates of similar brand.

REMARKS.—Our Market remains in a healthy state, and although some branches of the trade are inactive, still, on the whole, there is cause for satisfaction, as a fair average demand exists for most metals. The trade of late years has become very much divided, owing to the increased number of new firms perpetually springing up, and which has resulted in a less profitable business, yet the competition at the present time does not appear quite so keen as hitherto, and this is a significant sign of the times—either there is more unanimity amongst sellers now that they have suffered, and seen the folly, and paid the penalty, of imprudently underselling, or that commerce is more widely spread, evenly dispersed, and a fair share falling to the lot of everyone, so that whichever way it may be the interest of all must clearly be benefited. Combinations are objectionable, and invariably terminate unsuccessfully, but a good understanding amongst sellers prevents unnecessary sacrifices, and is calculated to impress buyers with a better opinion of the market. Rivalry within moderate bounds is legitimate enough, but when carried to excess, destructive of principal and profit, it is a monstrous absurdity, generally ending in ruin.

COPPER.—Since the slight concessions made for India sheets the smelters have been rather better supplied with that description of work, and are now less anxious than formerly about orders for manufacture, and have declined some very good offers for large quantities of 4 by 4 sheets, at limits slightly below the price that they have been willing to submit to. This tends to give a stronger tone to the market, and will impart confidence to buyers. Sellers entertain great hopes in respect to the future; they rest upon the expectation of a large demand ahead for all sorts. Not only does the demand for India sheets increase, as shown by the statistics of comparative exports in last week's *Mining Journal*, but the home trade is also marvellously extending itself, notwithstanding the substitution in places of other metals, and will doubtless continue to do so in proportion as the population multiplies. In every direction, and for all sorts of purposes, a vast consumption is constantly going on. The quantity used must be immense, especially in the manufacture of yellow metal sheathing and braziers, brass castings, machinery, engines (both stationary and locomotive), railway carriages and vehicles of every kind, harness, gas-fittings, nails, coinage, musical instruments, telegraphs, cartridges, &c. Its various uses, in an alloyed and unalloyed state, are extraordinarily diversified. For instance, in nearly every house, church, brewery, and public building it is more or less to be found in the shape of locks, knobs, hinges, hooks, taps, stills, bell-wire handles, door-plates, roofing, &c., besides general domestic and other purposes, even part of the dress of most people, contain a certain percentage. But it is needless to enumerate more. That which is already stated is surely sufficient to convince the greatest sceptic, while these varied and continuous outlets exist, that there can hardly be any falling off in the demand for any length of time; and, in the end, this important fact cannot fail to be established, that "the consumption of copper is ever greatly increasing." Ores have again realised 13*s.* 3*d.*, and buyers begin to despair of obtaining any reduction. Chili bars, at present, 68*l.* 10*s.* to 68*l.*, brand and prompt regulating the price. Australian, 76*l.* India sheet, 75*l.* to 77*l.* per ton.

IRON.—The markets are steady, and prices very firm. The chief matter which has occupied the attention of the trade this week has been the decision of the meeting at Birmingham. The general opinion is divided, and it is difficult to foresee the consequences. The advance in wages agreed upon to be given to the puddlers only, and not to the millmen, is likely to keep the agitation about a little longer. It is said that the masters, in order to keep up the price of iron, will insist upon a rise the masters will have to succumb, and pay the advance demanded. Although it was agreed at the meeting that there should be no alteration in the list prices nearly all the leading ironmasters have issued printed notices that further orders must be subject to a rise of 10*s.* per ton, and there is scarcely a house who would sell at any less advance, indeed most of them are very indifferent about taking orders, as they are looking for still higher prices, and should the advance in wages be also given to the millmen there is no doubt that the list price will be raised 20*s.*; whether it will be present to do so is questionable. The rise of 2*s.* 6*d.* to 5*s.* per ton in iron was justifiable on account of the gradual improvement in the demand, but it is doubtful whether a 20*s.* rise would not very materially curtail orders. A good deal of the business doing lately has been brought about by the prospect of dearer prices, so that many buyers have purchased in anticipation of their requirements, and will certainly not be in the market again for some time. The advance will give a decided check to the export trade for a time. The autumn is fast approaching, and many of the northern ports will be closed shortly. Under these circumstances it seems most advisable to adhere to the rise that has already taken place—10*s.* per ton, and this would seem to meet the case without injuring the demand. For it must not be forgotten that it is not so much to the amount of business doing that the rise may be attributed, but to the determination on the part of the men, taking advantage of harvest time, to secure a higher rate of wages. It is to be hoped that both sides will be reasonable, and adjust their claims with moderation, and be actuated solely by one motive, that of mutual interest, and a settlement based upon this footing will prove to be more durable and satisfactory. Welsh bars are 2*s.* 6*d.* to 5*s.*, better, and ironmasters are not inclined to sell large quantities at present, preferring to wait awhile before engaging too deeply. In Swedish iron no change has occurred; the market still being bare of stock, and all cheap parcels disposed of, the future course of this market is in an upward direction. A little fluctuation has shown itself in Scotch pigs; the price receded at one time to 62*s.* 15*d.* cash, and again recovering about 6*d.* per ton. The shipments have not been quite equal to former weeks lately, and which produced some slight influence.—To August 22, 1871, 12,555 tons; August 27, 1870, 12,528 tons; increase, 27 tons. Total increase since December 25, 1870, 126,325 tons.

LEAD.—Our market maintains itself very evenly; scarcely any variation in prices occur, but if anything rather stiffening. The demand for China is limited.

SILVER.—A further reduction is reported in Silesian; a sale of 175 tons, at 17*l.* 18*s.* 3*d.* on the spot; 120 tons of zinc sold by auction at 21*l.* 15*s.* to 22*l.*

TIN.—English remains easy, at former rates. Foreign has not undergone any material change in value. Operators are waiting to see the effect produced by the announcement of the Dutch sale of Banca, which is to take place on Sept. 28. The quantity to be brought forward is 83,300 slabs of Banca and 2000 slabs of Billiton. The deliveries for July are not equal to the former month, and may exercise little adverse influence, but no fear is expressed with regard to the strength of the market. There may be a temporary fluctuation in price until the sale comes off, and the result of the sale will determine the future course. Straits is now quoted 130*s.*; Banca, 135*s.*

QUICKSILVER.—There is still but a small amount of business doing, yet holders do not care to press sales, as an improvement is anticipated.

CHEMICALS AND MINERALS.—(Messrs. J. Berger Spence and Co., Manchester, Aug. 31.)—Soda: Cream caustic, little alteration at 12*l.* 15*s.* to 13*l.* 5*s.*; white, 60 per cent., 13*l.* 15*s.* to 14*l.*; soda ash firm at 24*d.* to 25*d.* per degree; Soda crystals advanced 5*s.* 5*d.* to 5*s.* 7*d.*; bi-carbonate, 13*l.*; salt-cake, 3*s.* 5*d.*; Glauber salts, 5*s.* 6*d.*; nitrate of soda, quiet at 14*s.* 3*d.*—Potash: Murates, 80 per cent., limited demand at 9*l.*, 9*s.*; Prussiate, red, at 2*s.* 6*d.* to 2*s.* 7*d.*; yellow, 1*s.* 8*d.* to 1*s.* 9*d.*; chlorate, 1*s.* 7*d.* to 1*s.* 8*d.*; bicarbonate, 8*s.* 4*d.* to 10*s.*; potashes, 3*s.* 6*d.*; pearl ashes, 4*s.* 6*d.* to 4*s.* 8*d.*; Alum: At 6*s.* 5*d.* to 6*s.* 10*s.* for loose lump; in export barrels, 7*s.*; ground, 7*s.* 10*s.*—Ammonia: White and grey, 19*l.* to 19*l.* 10*s.*; brown, 14*l.* to 14*l.* 5*s.*; carbonate, 6*s.* 4*d.* per lb.—Iron Salts: Green and rusty coppers, fair enquiry, at 52*s.* 6*d.* to 55*s.*; dry, 52*s.*—Copper Salts: Sulphate of copper, at 24*l.* 10*s.* to 25*l.*—Arsenic, at 6*l.* 10*s.* to 7*l.* 5*s.* for fine powdered.—Acid: Tartaric improved, at 1*s.* 3/4*d.* to 1*s.* 3/4*d.*; oxalic steady, at 15*d.* to 12*d.*; sulphuric, 3*s.* 10*s.* to 3*s.* 18*s.*; carbolic, at 1*s.* 10*s.* to 1*s.* 20*s.*—Magnesia: Epsom salts, 4*s.* 10*s.* to 4*s.* 17*s.*; red, refined—Oleum: Oleum of castor oil, 48*s.* to 50*s.*; spindle, loom, and dense oils, 4*s.* to 5*s.* 6*d.*; pure white Norwegian cod liver

oil, 4*s.* 6*d.* to 6*s.* per gallon.—Pitch: At 13*s.* to 15*s.*—Benzole: Firm; 30 per cent., at 3*s.* to 3*s.* 3*d.*; 50 per cent., at 3*s.* 6*d.* to 3*s.* 9*d.*; 90 per cent., at 4*s.* to 4*s.* 6*d.*—Disinfectants: Patent, 5*s.*; carbolic acid, 10*s.*—China Clay: 2*s.* per ton. Phosphates: Super-phosphates, 2*s.* to 3*s.* 10*s.*; precipitated phosphates, 4*s.* to 5*s.* per cent., 2*s.* to 3*s.* 10*s.*; Estramadura, 1*s.* 2*d.* to 1*s.* 2*d.*; mineral, 5*s.* to 6*s.* per cent., 10*s.* per unit.—Manganese: 7*s.* to 9*s.* for 70 per cent.; minor qualities, 10*s.* to 1*s.* per unit.—Iron Ore: Hematite, 1*s.* to 2*s.*; 20*s.*; oolitic, 6*s.* 9*d.* to 7*s.* 6*d.*

THE TIN TRADE.—Mr. L. Th. van Houten (Rotterdam, Aug. 31) writes:—The Dutch Trading Company has this day fixed the autumn sale of Banca tin to take place in Rotterdam, on Sept. 28, 1871, when 83,300 slabs Banca and 2000 slabs Billiton will be brought forward, in lots of 100 slabs. The directors further give notice that no tin will be brought in the market by them before the spring sale next year. Also, that till this period no Government sales of Banca tin will take place in the Dutch East Indies, and that no shipments of this metal will take place from the East Indies to China for Government account. The above engagement does not apply to tin belonging to other parties.

Tin has been very quiet this month, the demand both for export and on speculation being of a limited character, principally owing to the fact that prices continue to rule much above the parity of the London market. The autumn sales consisting of 83,300 slabs Banca and 2000 slabs Billiton, has to-day been fixed to take place in Rotterdam on Sept. 28. Banca has been in moderate demand, and the price has gradually receded from 80 1/2*s.* to 79 1/2*s.* f. Ex the autumn sale a few transactions at 79 1/2*s.* f. to 78*s.* f. are reported. Billiton has been dull of sale, and the price has given way from 79 1/2*s.* f. to 78 1/2*s.* f. On the 25th inst. 1000 slabs landing were sold by tender on private terms: 7800 peculs offered in Batavia on the 7th inst. fetched the average price of 84 1/2*s.* f., costing to sell here 78 1/2*s.* f. The position of Banca tin in Holland on Aug. 31, according to the official returns of the Dutch Trading Company was:—

	1871.	1870.	1869.
Import in August	22,327	5,918	587
Total eight months	95,574	129,851	45,066
Deliveries in August	7,342	4,193	7,990
Total eight months	107,191	84,359	64,173
Stock second-hand	44,600	64,772	81,347
Total stock	151,811	149,555	152,156
Stock of Billiton	6,601	1,898	6,114
Import in August	6,050	850	8,100
Delivered and shipped in August	3,373	2,150	5,500
Quotation Banca	79 1/2 <i>s.</i> f.	75 <i>s.</i> f.	79 <i>s.</i> f.
Aug. 31 Billiton	78 1/2 <i>s.</i> f.	73 <i>s.</i> f.	77 1/2 <i>s.</i> f.

These returns compared with those of 1870, exhibit—An increase of the import for August of 513 tons, a decrease of the import for the eight months of 1062 tons, an increase of the deliveries for August of 98 tons, an increase of the deliveries for the eight months of 635 tons, a decrease of the stock second-hand of 321 tons, a decrease of the unsold stock of 646 tons, a decrease of the total stock of 57 tons, and an advance of the quotation of Banca equal to 8*s.* per ton. The quantity of Banca tin now afloat for the Dutch Trading Company is 6200 peculs, equal to 388 tons, against 20,900 peculs, equal to 1306 tons last year. We estimate the quantity of Billiton tin now afloat at 5971 peculs, equal to 373 tons, against 8411 peculs, equal to 503 tons last year. The Government returns for the month of June are as follows:—

	1871.	1870.	1869.	Six months.	1870.	1869.
Germany ..Tons	320	131	115	1871	1054	895
England ..	93	177	75	751	779	309
Belgium ..	170	387	83	661	1416	841
France ..	39	13	8	117	61	51
Hamburg ..	3	32	—	3	51	18
United States ..	86	61	8	287	142	47
Other countries ..	—	—	—	—	—	—
Total ..Tons	702	801	289	3380	3503	2161

COPPER.—Messrs. J. Piteairn-Campbell and Co. (Liverpool, Aug. 31) During the fortnight there has been a complete want of animation in all branches of the copper market, and we have seldom experienced so little demand. There are, however, symptoms of some revival, and we hope in our next report to report increased activity. Quotations are 68*l.* 10*s.* to 68*l.* 10*s.* for Chili bars, 74*l.* to 76*l.* for Chili ingots, 13*s.* 9*d.* for good Chili ore and regulus, and 15*s.* for Corocoro Barilla. Business transacted during the fortnight comprises 257 tons bars, at 68*l.* 10*s.* to 68*l.* 10*s.* per ton, and 270 tons regulus at Swansea, at 13*s.* 9*d.* per unit. Since writing the above 400 tons Lota bars have been sold at 66*l.* 10*s.* per unit. Arrivals here during the fortnight of West Coast, S.A., produce—Silver Craig, from Valparaiso, with 290 tons regulus; Miami, from Guayaquil, with 670 tons bars and 200 tons ingots; Galatea, from Valparaiso, 448 tons bars and 195 tons ingots. At Swansea—nil. Stocks of copper (Chilian and Bolivian) in first and second hands likely to be available are—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	918	2109	10,247	1598	160
Swansea	3741	5151	3,605	167	222
Total	4659	7260	13,752	1765	382

Representing about 20,000 tons fine copper, against 18,200 tons fine copper, Aug. 31, 1870; 14,200 tons Aug. 31, 1869; 8800 tons Aug. 31, 1868.

Messrs. James and Shakspeare—About 300 tons regulus in Swansea has been sold at 13*s.* 9*d.*, but with that exception there were no transactions in copper material, for which buyers do not seem inclined to pay more than 13*s.* 6*d.* per unit. Bars have realised 67*l.* 10*s.* to 68*l.*, according to brand, though these figures have only been given for small parcels, and it is difficult either to purchase or sell at the market quotations, especially if choice brands be required. For many months past the only sorts of which any important quantities could be obtained have been Lota and Urmeneta, and as these form the chief part of the Chili imports they afford a true index of the state of the market than do the values paid for other brands. Yesterday a sale of 100 tons Lota was reported at 66*l.* 10*s.*, cash terms, and the price may be considered high in the present state of copper. Nothing doing in Australian, and buyers' offers are at about 20*s.* per ton under our lowest list values, which decline holders refuse to meet. English is somewhat pressed for sale at a reduction from the official list prices, but meets with no demand.

THE MINING SHARE MARKET has again been moderately active, though business transactions have been somewhat interfered with by the settlement of the fortnightly account. The mines chiefly in demand have been New Rosewarne, Treleigh Wood, Pennerley, Wheal Lucy, East Lovell, Wheal Grenville, West Caradon, West Basset, Great Vor, Carn Brea, East Van, Van Consoles, Eberhardt and Aurora, Pacific, Utah, and South Carn Brea. Business has also been done in Dolcoath, Pennerley, Marke Valley, West Frances, West Caradon, Roman Gravels, South Condurrow, and a few other mines.

Carn Brea shares dropped on Thursday 10*l.* each, owing to the smallness of the dividend, and leave off 130 to 135; at the meeting the accounts showed a profit on the quarter of 2700*l.*; a dividend of 2000*l.* (2*s.* per share) was declared, and a balance of 5500*l.* carried forward. It was stated at the meeting that, in addition to the profit shown by

in excess of former reports. East Dolwen, 1½ to 1½; a discovery of lead ore is reported here. Marke Valley, 5½ to 5½. Devon Great Consols, 95 to 105; the lode in Cole's winze, below the 130, is still worth 50 tons of ore, or 100% per fathom; Railway shaft 80% per fm. New Lovell, 37s. 6d. to 40s.; North Roskear, 17 to 19; Parys Mountain, 3 to 3½.

South Carn Brea shares have been flatter, and leave off 20s. to 25s.; the 130 end is worth 25s. per fathom, the 110 fm. level 25s. per fathom, and the rise in back of the 130 is worth 15s. per fathom. Pennerley, 3½ to 4; Roman Gravel, 18½ to 19½; South Caradon, 200 to 220; South Condurrow, 9½ to 9½; Tankerville, 16½ to 17½; West Chiverton, 20 to 21; Wheal Agar, 30s. to 35s.; Wheal Basset, 60 to 65; Wheal Lucy, 3½ to 3½. Wheal Margaret, 16 to 17; at the quarterly meeting a dividend of 560s. (12s. 6d. per share) was declared. The profit on three months was 592s. The tin sold realised 2608s. The mine is said to have improved. Wheal Jane, 40 to 42; Wheal Kitty (St. Agnes), 9½ to 9½; Wheal Mary Ann, 8 to 9; Wheal Ury, 8 to 8½; Dolcoath, 17½ to 18½. West Basset shares have advanced to 4½, 5; West Caradon to 2½, 2½; and Wheal Grenvilles leave off in demand at 7½ to 7½.

Among foreign mines a large business has been transacted in Eberhardt and Aurora shares, which have also fluctuated violently, and as much as 6s. per share in a day. The lowest price reached during the week has been 29 and the highest 41, and they leave off 39 to 40. The advices are said to be of the most favourable character and report the discovery of a rich silver deposit in North Aurora. A very large weekly profit is also being made. South Aurora shares have continued flat, and leave off 3½ to 4½. The advices are not so favourable, and as the mine is not at present producing ores sufficient to keep the mill going, the agent has contracted to crush about 1500 tons for the Eberhardt and Aurora Company, who have more stuff than they can manage with their large mill. Pacific shares have been in demand, and advanced to 5 to 5½; Utah, 15 to 16. The advices continue to be very favourable. A fine rich body of ore has been met with in the long tunnel, or bottom of the mine. Chontales, 30s. to 35s.

The Market for Mining Shares on the Stock Exchange during the week has been very active for Eberhardt, Pacific, Utah, Don Pedro, and Sweetland Creek shares, but the chief attention has been directed to Eberhardt and Pacific. The former has risen from 32 to 40, being an advance of 8s. during the week. A most important discovery has been made in the North Aurora, belonging to the Eberhardt and Aurora Company, materially increasing the permanent value of this property. The importance of the late discoveries at Pacific is attested by the sales of ore, which appear likely to place this company in the Dividend List. A sale of 50 tons of ore realised £10,200. In the north cross-cut there are 750 ft. of backs, worth 650s or 115s. per ton, and it is calculated the produce will soon be 5 tons per day. Shares are firm, at 5½ to 5½. South Aurora Mine shares were flat during the early part of the week, but they close firm, at 4 to 4½. Sweetland Creek shares are steady, at 4 to 4½, ex div. of 4s. paid on Wednesday. Good progress is being made towards another dividend. Don Pedro shares maintain the late advance, and are steady at quotations. Utah shares are quiet, but firm. The advices on all hands are most encouraging. The first parcel of bullion was sold on Monday, at \$163 per ton, being considerably in excess of the valuation of the vendor. The furnace was running well, so that large and regular returns may now be looked for. The two new furnaces will shortly be completed and set to work. Private letters state that in running the tunnel (in the bottom portion of the mine) a fine rich body of ore has been cut into. Shares close 15 to 16, firm. In Lead Mines East Van, Pennerley, Van, Tankerville, Roman Gravel, and Assheton have been fairly dealt in. The report from Pennerley is of a greatly improved character. Important discoveries are indicated, especially in the 130, east of engine-shaft, where the lode has increased to 3 ft. in width, and ore throughout. At Potter's pit (adjoining the Tankerville Mine) the lode in the 25 has a promising appearance, and is producing rich stones of lead ore, with every indication of being on the top of a rich pipe of ore. The agent writes that there are still better indications. There will probably be an increase in the monthly sale of ore. The shares are in demand at 4 to 4½, and firm. Van has sold for the month 450 tons of ore, at 12s. 9s. per ton, and 100 tons of blende, at 3s. 8s. 6d. In Tankerville and Roman Gravel shares a fair amount of business has been transacted, the latter having advanced to 19½; the mine is opening out remarkably well, and realising considerable profits, which will progressively increase. In other lead mines no quotable change has taken place.

In tin mines the business has been restricted; Carn Brea and East Lovell are flatter, Great Vor and Tincroft are steady.

The following are the closing quotations:—Assheton, 5 to 5½; Rog, 2½ to 2½; Pennerley, 4 to 4½; Perkins Beach, 1½ to 1½; East Van, 13½ to 13½; Carn Brea, 130 to 135; Devon Great Consols, 97½ to 102½; Great Laxey, 16½ to 17½; Great Wheal Vor, 9½ to 10; Marke Valley, 5½ to 6; Tankerville, 16½ to 17½; Tincroft, 48 to 50; Van, 56 to 58; West Chiverton, 20 to 21; Almada and Triton, 1-16th to 3-16ths prem.; Birdseye, 4 to 4½; Cape Copper, 7 to 8 prem.; Colorado Terrible, 6½ to 6½; Don Pedro, 2½ to 3½ prem.; Eberhardt and Aurora, 39 to 41; Pacific, 5½ to 5½; Sierra Buttes, 4½ to 5; St. John del Rey, 31 to 32; Sweetland Creek, 4 to 4½, ex div.; United Mexican, 3½ to 3½; Utah, 15½ to 15½; Silver Plume, 3 to 3½.

The following dividends were declared during August:—

Mine.	Per share.	Amount.
Mina.	£4 15 0	£8550 0 0
Dolcoath	3 10 0	5012 0 0
Tankerville	0 6 0	3600 0 0
Wheal Kitty	0 10 0	2147 10 0
Carn Brea	2 0 0	2000 0 0
North Levant	0 15 0	1500 0 0
Botallack	6 0 0	1200 0 0
East Wheal Lovell	0 12 6	1191 5 0
West Wheal Seton	2 10 0	1000 0 0
Penbals	0 3 0	750 0 0
Wheal Owles	8 0 0	640 0 0
Wheal Margaret	0 12 6	560 0 0
Sweetland Creek	0 4 0	3000 0 0
Total		£31,150 15 0

The EAST BOSCAWELL TIN MINING COMPANY has been formed for working an extensive mineral property situated in the St. Just district. The property, which is in the neighbourhood of Botallack, Levant, Boscawell, Wheal Owles, and Boscawell Mines, is described by Capt. William Eddy (the manager of Boscawell), who has had many years of practical experience in the district, as a promising mine, and says a doubt cannot exist in the mind of any practical person that if the sett is properly developed it will become a valuable property. The late owners expended a considerable amount of capital in sinking two shafts and driving levels, the value of which the company is stated to be about 10,000, besides the depth having been attained whence the promising lodes, as yet but little worked, can be fully proved, the one lode that has been developed to any appreciable extent having yielded thousands of pounds worth of tin. The property is held on lease for 21 years, at a royalty of 1-24th, and the vendor has agreed to sell it, including buildings, plant, &c., for 3000 paid-up shares, and 2500s. in cash. The capital is 15,000s., in 3000 shares of 5s. each.

The INDEPENDENCE GOLD MINING COMPANY (to which reference is made in the Mining Journal of Aug. 12), with a capital of 20,000s., in shares of 5s. each, has been formed to purchase, for 160 miles north-east of San Francisco, and 14 miles east of Sonoma, the Independence Mine, adjoining the Sierra Buttes property, and dipping at an angle of 45°. The claim is 5000 ft. on the course of the vein, and 500 ft. wide. It is worked principally by day levels, and a large body of auriferous quartz has been laid open by them. The value of the quartz is from \$13 to \$18 per ton, and the concentrated sulphurets yield as much in some cases as \$73s. The machinery is driven by water from mountain lakes, supplied by natural springs and the melting of snow. The property has been inspected by Captain N. Bray, of Tregaron, North Wales. It is computed that when the mine is fairly laid open, and the necessary machinery erected, between 3000 and 4000 tons of quartz per month can be crushed, a quantity easily obtainable from such a large lode,

realising the statement of Capt. Bray and Prof. Price "that there is every probability of the mine vying with its rich adjoining neighbour, the Sierra Buttes, at no distant period, the lode or vein being large, well-defined, and of great prospective value." It is calculated that the above return will yield a profit of from 4000s. to 5000s. per month, equal to a dividend of between 40 and 50 per cent. per annum on the capital. Messrs. James Hall, James Shepherd, and J. E. Smith (members of the Stock Exchange) are the directors. The prospectus appears in another column.

At Bedruth Tieketing, on Thursday, 1467 tons of copper ore were sold, realising 5290s. 13s. The particulars of the sale were—Average standard, 101s. 14s.; average produce, 6½; average price per ton, 3s. 12s.; quantity of fine copper, 91 tons 14 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Aug. 3.	2433	100	10	6½	£4 0 0	11s. 11d. £59 5 6
" 17.	4188	98	8 0	6½	3 15 0	11 7 68 0 0
" 31.	1467	101	14 0	6½	3 12 0	11 6½ 57 14 0

Compared with the last sale, the advance has been in the standard 3s., and in the price per ton of ore about 4s.

At Carn Brea quarterly meeting, held at the mine on Wednesday, the profit on the quarter's working was shown to be about 3000s., less 300s. expenses on closing the London office. A dividend of 2000s. (2s. per share) was declared, a balance of over 5500s. being carried forward. This is the first dividend that has been made under Cornish management, and Capt. Teague was highly complimented on the success attending the mine. The actual money profit shown on the quarter's working does not actually represent the profits made during that time, as probably not less than 2000s., in addition to the ordinary outlay, has been expended in building new engine-house, tramway, &c.

At North Levant meeting, on Wednesday, the accounts showed a credit balance of 1728s. 16s. 2d. A dividend of 1500s. (15s. per share) was declared, and 223s. 16s. 2d. carried to credit of next account. Captains Bennetts, Thomas, and Eddy reported upon the various points of operation.

At East Wheal Lovell quarterly meeting, held at the Star Hotel, Helston, on Wednesday, Mr. H. Rogers, the purser, presided. The accounts showed a balance brought forward from the last meeting of 517s.; merchants' bills and labour cost to end of June having been deducted, there remained an available balance of 1258s. It was resolved to divide 12s. 6d. per share, and carry forward 66s. 17s. 4d.

At Wheal Margaret meeting, on Aug. 23, the accounts showed a profit of 550s. 2s. 7d. on the three months' operations, and a credit balance of 552s. 18s. 11d. A dividend of 500s. (12s. 6d. per share) was declared, carrying forward 22s. 18s. 11d. to the credit of the next account. It was resolved that in future the tin be sold by tender. On the whole, the prospects of the mine are stated to have improved since the last report, and should no falling off take place, the agents hoped to show an increased profit at next quarterly meeting.

At Wheal Arthur meeting, held at the mine, on Monday, the accounts for the four months ending May showed a credit balance of 681s. 8s. A dividend of 614s. 8s. (15s. per share) was declared. The committee were re-elected—Messrs. Robert F. Alston, James Rodger, Wm. Ewing, G. Stewart Anderson, and T. Currie Gregory.

At Blue Hills Mine quarterly general meeting the loss on the three months was 213s. 7s. 2d., and the balance against the mine 869s. 0s. 6d. The agents report that "the prospects of the mine never looked so cheering as at present in almost every tutwork point in operation, and we feel confident of ultimate success, and that a continuation of present prospects will very soon convert the debit into a credit, and the mine become a lasting and profitable one to the adventurers."

At Nanjules Mine meeting, on Aug. 24 (Mr. B. Matthews in the chair), the accounts for the three months ending June showed a debit balance of 1732s. 9s. 9d. A call of 8s. per share was made, 5s. 6d. being on account of the debit balance, and 2s. 6d. on account of new stamps and erections. It was resolved that all shares in arrear of more than one call be declared forfeited, subject to restoration if the amount due be paid within 21 days. Captains James Rowe and James Rowe, Jun., reported that but for the unexpected influx of water from the adjoining mines they would at the present moment have been in a paying state, and saved at least 400s. to 500s. in working expenses. The future prospects in the south part of the mine are good.

At East Chiverton Mine meeting, on Aug. 16 (Mr. T. Woodward in the chair), the accounts for the four months ending June showed a debit balance of 11, 2s. 6d. A call of 2s. 6d. per share was made. Capt. Gross and Southey report that they are daily expecting a good lode in the 52. Their engine and pitwork are in good order, and their prospects never looked better than now.

At Great Caradon Mine meeting, on Aug. 15 (Mr. P. Blake in the chair), the accounts for the four months ending June showed a credit balance of 228s. 2s. 1d. A call of 1s. 6d. per share was made. Capt. W. Taylor reported that the machinery and pitwork are all in good order, and working well.

At Wheal Ida meeting, on Aug. 15 (Mr. P. Blake in the chair), the accounts for the four months ending June showed a credit balance of 152s. 0s. 2d. A call of 6d. per share was made. Capt. Wm. Taylor reported that the next three or four months will, probably, be sufficient to prove whether they will continue their mining operations or not.

At New Wheal Seton meeting, on Aug. 24, the accounts for the four months ending June showed a debit balance of 838s. 1s. 3d. A call of 3s. per share was made. Capt. Malachi Bath reported upon the various points of operation. He is still of the same opinion that, looking at the 100, 110, and 120 fm. levels in West Seton, the latter level turning out 9 tons of ore per fm., and about 70 fms. from West Seton boundary, speaks well for the mine, and by a little more perseverance good results will be realised.

At the Rhymer Iron Company meeting, on Wednesday, a dividend was declared of 1s. 10s. on each 50s. share, and 9s. on each 15s. share for the half-year ending June.

The shares of the Mineral Hill Silver Mines Company (Limited) are 17½, and the debentures 102 to 103.

The shares of the South Aurora Silver Mining Company are 3½ to 4½. Mr. James W. Thomas, of the firm of Tilly and Thomas, public auditors and accountants, has this day been appointed the official liquidator of the Pen'Alit Silver-Lead Mining Company (Limited).

COAL MARKET.—The fresh arrivals this week number 76 ships of all kinds. The demand for household coal has ruled dull throughout the week, with a general decline in prices of from 3d. to 6d. per ton. Hartley coals have remained steady, and without change in value. Hetton Wallsend, 18s. 3d. per ton; Original Hartlepool, 18s.; Wallsend Harton, 15s. 6d.; Hetton Lyon's Wallsend, 15s. 6d.; Hawthorn Wallsend, 15s. Unsold, 2 cargoes; 10 ships at sea.

TO COAL MERCHANTS, AND OTHERS.

THE TUNBRIDGE WELLS LOCAL BOARD are ready to RECEIVE TENDERS for the SUPPLY of from TWO HUNDRED to THREE HUNDRED TONS of hand-picked STEAM COALS, from the following veins:—

NIXON, TAYLOR, AND CORY'S "NAVIGATION."
FOWELL'S "DUFFRYN."
FOTHERGILL'S "ABERDARE."
M. JONES'S "MANTMELLYN."
WAYNE'S "MERTHYR."
DAVIES' "BLAENGWAWR."
INSOLES AND SON'S "ABERAMAN" "MERTHYR."
DERBYSHIRE STEAM COALS.
TANFIELD MOOR COALS.

The same to be delivered at the Waterworks, at Pembury, Kent, in accordance with the orders of the engineer.

Tenders to be sent in by Saturday, the 16th September, 1871.

The lowest, or any tender, will not necessarily be accepted.

Address for further particulars to—

THOMAS LEWIS, Clerk to the Local Board, Town Hall, Tunbridge Wells.

29th August, 1871.

BUCKLEY COLLIERY, NEAR MOLD.

TENDERS for this CONCERN to be forwarded to B. MART by the 4th September next.

Particulars of all accounts owing by the Buckley Colliery Company (Limited), also all accounts owing to the said company, must be sent to B. MART, Mining Engineer, Stoke-upon-Trent.

STRATHDON HEMATITE ORES.

THE PROPRIETORS of ALLARGUE, in the parish of STRATHDON, and county of ABERDEEN, are prepared to entertain PROPOSALS for a LEASE for RESUMING MINING OPERATIONS in this field.

Application may be made to MILNE and WALKER, Advocates, 16, Union-terrace, Aberdeen.

TO SECRETARIES OF MINES, AND OTHERS.

THE PROPRIETORS of a LEAD MINE, of unusual promise, in a good district in the eastern part of CORNWALL, are desirous of obtaining the SERVICES of a Gentleman who will undertake the REGISTRATION of the concern under the Limited Liability Act, and will otherwise ASSIST IN BRINGING IT BEFORE THE PUBLIC, with a view to his official connection therewith. Liberal terms will be agreed to. First-rate reports are already obtained.

Address, "E. C.," Post Office, Gunnislake, near Tavistock.

INVESTMENTS IN WELSH MINERAL PROPERTIES.

M. R. WILLIAM LINTER, MINING ENGINEER, SURVEYOR, AND VALUER, PONTYPRIDD, SOUTH WALES.

Having a very intimate knowledge of the localities and conditions of some of the concerns in South Wales, recently introduced to the investing public, is in a position to confidentially advise bona fide investors respecting the holding, selling, or purchasing of interests in those concerns.

The soundest information guaranteed, and the highest references given as to ability and respectability.

Estates and properties carefully surveyed and valued.

ZINC AND LEAD ORES.

I BUY at the HIGHEST PRICES:—

BLLENDE.—CALCINED AND RAW CALAMINE (carbonate or silicate)
LEAD ORES.—LEAD-SILVER ORES.—SILVER ORES.
ZINC AND LEAD ORES MIXED TOGETHER.
SILVER LEAD in a rough state (containing antimony, &c.)
SULPHATE OF LEAD, &c.
I BUY any quantities, however large, contracting for as many years as desired. Particulars by letter.

ARMAND FALLIZE, Ingénieur, à Liège (Belgium).

SILVER-LEAD MINE.

WANTED, TWO or THREE GENTLEMEN to ASSIST in WORKING a VALUABLE MINE in the best part of CARDIGAN-SHIRE.
Apply to "T. M.," Post Office, Zoa-place, Cold Harbour-lane, Brixton.

WANTED, a SITUATION, to TAKE CHARGE of a LEAD MINE, by one who has had extensive experience, and thoroughly understands Dripping, Mapping, and Assaying, together with every other branch connected with Mining.
Testimonials and references can be produced from high authorities.
Address, "A. B. I. O.," Times Office, Douglas, Isle of Man.

[The Advertiser knows of a VALUABLE PIECE of MINERAL GROUND on the Island, which he could secure; but, as he requires some little assistance, would like to correspond with parties who are disposed to assist in its development.]

WANTED, a SITUATION as VIEWER or RESIDENT VIEWER. Can be well recommended by several leading Mining Engineers.
Address, "T. A.," MINING JOURNAL Office, 26, Fleet-street, London.

WANTED, by a Gentleman who has an extensive acquaintance with Birmingham manufacturers, a COMMISSION for the SALE of COPPER, SPELTER, TIN, or TIN PLATES.
Apply by letter to "M.," New Club, Birmingham.

WANTED, by the GENERAL MINING COMPANY FOR IRELAND (LIMITED), a GOOD PIT and TIMBER MAN.
Apply, with copy of testimonials and references, to THOMAS BAKER, Esq., Secretary, 29, Westmoreland-street, Dublin.

WANTED, a SECONDHAND CORNISH PUMPING ENGINE, 40 or 50-hp. cylinder, in good working condition.
Address, stating the full particulars, with price, to Mr. GRANVILLE SHARP, 2, Gresham-buildings, Basinghall-street, London, E.C.

A MINING ENGINEER, of large experience, OFFERS his SERVICES to anyone requiring REPORTS, VALUATIONS, PLANS, ESTIMATES, or ADVICE of any kind as to the OPENING OUT or WORKING of MINERALS at home or abroad.
Address, "C. V. and M. E.," MINING JOURNAL Office, 26, Fleet-street, E.C.

REQUIRED, for a SLATE QUARRY in NORTH LANCASHIRE, AN EFFICIENT CARPENTER, accustomed to MINE OR QUARRY WORK.
Address, with full particulars of ability, wages, and references, to Mr. EDDY, Skipton, Yorkshire.

TO CONCESSIONAIRES, PROMOTERS, AND FINANCIERS.
SHARES IN NEW ENTERPRISES SUCCESSFULLY INFLUENCED AND PLACED.
Address, in perfect confidence, "Operator," care of John Baptist Wolpert, Advertising Agent, 24, Austinfriars, E.C.

FOR SALE, separately, at reduced prices, the VALUABLE TOOLS and OTHER APPLIANCES used at New Dock Works, Leeds, in the manufacture of railway plant, wagon and carriage building, general engineering, &c., &c.

For prices and particulars, apply to Mr. JAMES POWELL, Consulting Engineer and Valuer of Engineering Plant, &c., 80, Basinghall-street, Leeds.

FOR SALE, THE CAMBRIA LEAD MINE.—The above Mine is situated within two miles of the Glandorey Station, on the Cambrian Railways, and there is an excellent road thereto.

There are two good lodes running one into another east to west, and the indications are most promising. There is also ample water power for all purposes of machinery and working of the mine in the driest weather.

For further particulars, apply to Mr. ADAM EVANS, Stationer, Machynlleth, Montgomeryshire.

FOR SALE, A FIRST-CLASS LEAD SETT. A shallow one, and from which £400 worth of lead has been sold.

To treat for the same, apply to W. PAYNTER, Jun., Wadebridge.

TWO IRLAND'S PATENT WROUGHT-IRON TURNABLES, with all FITTINGS, 12 feet diameter, TO BE SOLD, A BARGAIN,—good as new.

WHEATLEY KIRK AND PRICE, 35, Princess-street, Manchester.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Aug. 25—	Great Laxey	100	£21 3 0	Stock and Co.
" 26—	Dylliffe	75	11 3 6	Walker, Parker, & Co.
" "	Blanc Caelan	50	10 18 0	Burry Port Company.
" 29—	Foxdale	100	22 9 0	Walker, Parker, & Co.
" 30—	Perkins Beach	25	11 13 0	Burry Port Company.
" "	Fedw	20	11 7 6	ditto
" 31—	Trevelth	50	21 12 6	Stock and Co.
" "	Van	80	12 9 0	Walker, Parker, & Co.
" "	ditto	70	12 9 0	ditto
" "	ditto	50	12 9 0	ditto
" "	ditto	50	12 9 0	ditto
" "	ditto	50	12 9 0	ditto
" "	ditto	50	12 9 0	ditto
" "	ditto	50	12 9 0	ditto
" "	Foxdale	100	13 2 6	Treffry's Trustees.

BLLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Aug. 31—	Van	50	£3 8 6	Dillwyn and Co.
" "	ditto	50	3 8 6	Richardson and Co.

BLACK TIN.

Date.	Mines.	Tons c. q. lb.	Price p. ton.	Amount.	Purchasers.
Aug. 23—	Pedn-an-drea	10 0 2 23	£82 0 0	£822 17 10	Carvedras.

COPPER ORES.

Sampled Aug. 16, and sold at Tabb's Hotel, Redruth, Aug. 31.					
Mines.			Mines.		
	Tons.	Price.		Tons.	Price.
West Seton	65	£6 19 0	West Basset	26	£8 5 0
ditto	68	1 19 0	South Crofty	48	2 15 0
ditto	65	7 9 0	ditto	42	2 13 6
ditto	63	5 19 0	ditto	22	1 13 0
ditto	49	2 1 0	Poldice	60	3 12 6
ditto	40	5 5 6	East Seton	60	4 11 6
Mellancarr	110	1 9 6	North Downs	40	3 6 6
ditto	10	1 5 6	South Frances	24	3 16 6
ditto	50	4 14 6	ditto	15	4 13 0
ditto	40	1 16 0	West Damsel	37	3 6 6
ditto	10	11 7 0	Clifford	23	2 10 6
East Pool	77	2 10 0	Camborne Vein	14	6 2 0
ditto	67	2 15 0	ditto	3	2 17 0
ditto	65	2 18 6	South Condurrow	10	8 12 0
ditto	28	3 3 0	Wheal Buller	9	6 6 6
West Basset	42	6 0 0	North Roskear	7	5 6 6
ditto	41	2 2 0	Tolcarne	6	2 13 6
ditto	35	3 18 0	South Dolcoath	5	1 19 6
ditto	31	2 14 0			

TOTAL PRODUCE.									
West Seton	320	£160	8	West Damsel	37	£ 123	0	6	
Mellencar	310	711	10	Clifford	23	85	1	6	
East Pool	237	655	1	Camborne Veal ..	17	33	19	0	
West Bassett	175	72	16	South Condurrow ..	10	86	0	0	
South Crofty	112	280	13	Wheat Buller	9	56	18	6	
Poldice	60	217	10	North Roskear ..	7	37	5	6	
East Seton	60	274	10	Tolcarne	6	16	1	0	
North Downs	40	133	0	South Dolecath ..	5	9	17	6	
South Frances	39	163	1						

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accurate and useful work of reference.

FIRE-CLAY.—The correspondent who wrote respecting Fire-Clay in the Journal of Aug. 5 will oblige several readers if he will again communicate on the subject. As we have mislaid his address, we are unable to forward letters.

MINERAL DISTRICT MAP.—"E. J. D." (Cheltenham).—The mines included in the map of the Mineral district, advertised by "Commerce," are those extending from Trimley Hall and Frood Colliery on the north to the boundary of the parish of Chirk on the south, and from Pantglas and Panteglywseg on the west to Moreton Anglerum on the east. The scale is 6 in. to the mile.

MR. T. J. BARNARD'S MINES.—The writer of the letter signed "Investor" must append his name to his strictures if he wishes his views to be inserted.

SCALES FOR ADVERTISEMENTS.—Our charge for general advertisements is—for six lines and under, 4s.; per line afterwards, 8d. Average, 12 words per line.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, SEPTEMBER 2, 1871.

THE PRICE OF COPPER.

Again the miner, the dealer, and the manufacturer are disappointed at the dulness which has come over the copper trade, just when they expected the reverse. All alike anticipated a great increase in the business to be done, and an equivalent rise in price, the improvement to date from the declaration of peace between France and Prussia. Nor was, indeed, this conclusion unwarranted if the statistics of the consumption of copper were alone examined. Unfortunately this one-sided view was taken, and but serves as another proof of the danger of relying on statistics, unless all the attendant circumstances and data are taken into consideration. France was to take an excessive quantity for her actual necessities, and she was to buy it at once. Germany, also, was to assist on the return of peace in relieving us of large quantities, whilst India was to experience a great revival of general trade, and to be a certain and large buyer. Moreover, all this was to have happened at once, and to secure what was considered a certain profit there was a rush for copper about a month ago. No doubt all these results will occur in due time, but the mistake was to suppose that they could possibly take place immediately the war terminated.

A word as to France and her influence on the copper trade for some time past will not be out of season. When the purchases for that country were made direct by the French consumers from the English smelters, for delivery at the works of the former, the amount of business reported was almost exactly the *bona fide* consumption; but when Chili bars began to supply the place of English copper in the French rolling mills, and they were bought for delivery either in Liverpool, Swansea, or Havre, the French manufacturers obtained from the commission merchants the concession granted by the English smelters—that is, payment for the copper by bill at three months' date from date of purchase. From that time dates a very strong speculative element in the French copper trade. Some there were who continued to confine themselves to their legitimate manufacturing business, but to many the temptation of a long credit was too great, and large dealing transactions were entered into, misleading the public as to the extent of *bona fide* business doing. Moreover, these speculative transactions must have been very unprofitable to those engaged in them for some time previous to the outbreak of the war, and it is difficult to say what might have been the result to the trade; but of this we are well assured, that many had good reason to regret, in large losses, that they did not adhere strictly to their legitimate trade. This was the state of the French copper trade when the war broke out, just 15 months ago. It found France a large speculator, as well as a large consumer of copper. During the struggle, with but few exceptions, the copper manufacturers were idle, whilst waste and decay were excessively great. Unfortunately, however, copper is not easily destroyed, and although things made of it may be so injured as to require re-manufacture, yet, from the value of the metal, they are just those things which are to be first brought to market when necessity comes. Thus, at the termination of the war great quantities of old metal found its way into all the workshops of France. This supply of old materials must, of course, be limited, although it is difficult to say when it will be exhausted. Meanwhile, there is not that necessity for the purchase of Chili bars and English coppers generally. But when the trade shall come back to its old channels then another great difficulty will arise—the terms on which the transactions shall be renewed. Much greater confidence has, no doubt, been felt in the wealth of France since the last great Public Loan, and it may be that many will be found to revive the old system of credit with her metal manufacturers; but we must not expect the immediate assistance of that speculative element which, in days gone by, assisted in buoying up the trade. Not many, however, will be found rash enough to grant credit, even for the actual necessities of manufacturers, until France generally has signalled her contentment with the present form of Government. In truth, her immediate future, political and commercial, seems at the moment most uncertain. It is impossible, however, for so great and powerful a nation to occupy any but a foremost position, and believing that her good sense will be sufficient to prevent that restriction which a heavy import duty on raw material would lay on her commercial prosperity, there is every reason to believe that she will again take, as previous to July, 1870, some 20,000 tons of copper per annum. It may, and probably will, be some time before perfect confidence is revived, and until then we must wait.

Germany, on the other hand, with her coffers filled, and with all the prestige of a great conquest, is anxiously pushing with all her commercial sagacity into the metal trades, with redoubled vigour; her consumption of copper, however, cannot increase very rapidly, unless she becomes a great exporter of metal manufactures, since she is far too thrifty, even in her military system, to adopt, like France and England, brass and copper for guns and cartridges where iron and paper will answer the purpose. At the same time, her trade, internal and external, cannot but receive an impetus from her newly acquired position.

India, the third angel of comfort that was to come to the relief of the copper trade, seems to be its chief sorrow, as well as its chief hope. Who could estimate that in the six months ending June last there would be shipped from England to the three ports, Calcutta, Madras, and Bombay, between 3000 and 4000 tons of copper and yellow metal together less than in the six months of either of the two preceding years? The figures actually were—Six months ending June, 1869, 7000 tons; ditto, June, 1870, 7800 tons; ditto, June, 1871, 3700 tons. The figures include all forms of copper and yellow metal, as that is the only fair way to estimate the consumption, since one year one form is in demand and another year another form; in this, however, we may mention as a fact, that yellow metal is fast superseding copper throughout India. But to return to the actual exports. They show, indeed, a falling off almost unparalleled, yet not so astonishing when the whole condition of India is taken into account. India buys copper and metal as much for the bazaars of Persia as for her own requirements. Now the former, through the failure of the crops and the consequent famine, has hardly assisted at all in relieving the stocks at Bombay, whence she draws her principal supplies. The demand from the interior of India, which is much in direct proportion to the price of cotton, has been very small, through the low prices ruling for cotton. Again, the Indian trade, as a whole, has severely suffered from excessive and unwholesome speculation. For all these reasons we must not expect that because India took so much copper and metal last year she will be obliged to buy the same quantity this. But, above all, we must not expect the Indian markets to re-

spend to an advance based on speculation on this side. The telegraph carries daily the market reports to India, and the native dealers, into whose hands the copper trade has in a great measure passed from that of the Anglo-Indian merchant, are as well able to judge how far the moves in price are the result of speculation as are the London dealers and brokers. They have also felt their power in the trade, a power they are not likely to relinquish while the trade is constituted as it is. The telegraph and the Suez Canal have equally contributed to this aid. The first supplies them with information as to what is doing, and carries their orders to London with equal rapidity, whilst the latter brings them their goods within six weeks of the dispatch of their order by wire from India. Wisely, also, they have seen that by waiting they can generally buy at their own prices, and until the supply of copper diminishes they will hold this power, and any permanent advance will be difficult.

Reluctantly, but gradually, the Chilean miners are acknowledging the unprofitableness of late and present prices, and supplies from thence are considerably diminishing; in this, and in the steady absorption of the large stocks of copper in England, lies the great hope of higher prices. Advancing contemporaneously with it is that gradual enlargement of uses to which copper is applied. Sooner or later they will and must together help in raising the value of copper above a point which is unanimously admitted to be unprofitable to those engaged in its production.

RAILWAY IRON IN CANADA.

We recently called attention to the increase observable in the demand for British railway iron on Canadian account. The increase has since continued at an accelerated rate, the exports of this class of iron to Canada in June and July comparing as follows with the exports in the two corresponding months of 1870 and 1869:—

Month.	1869.	1870.	1871.
June	Tons 4618	Tons 3495	Tons 12,566
July	1648	6763	9,859

The total exports for the two months were thus 22,425 tons, against 10,258 tons in the corresponding period of 1870, and 6266 tons in the corresponding period of 1869. In other words, Canada has been taking of late three times as much of our railway iron as she did two years since. For the seven months ending July 31 this year the Canadian consumption of British railway iron amounted to 37,138 tons, against 22,412 tons in the corresponding period of 1870, and 19,258 tons in the corresponding period of 1869. It is a fact not, perhaps, generally known that Canada has been taking more of our railway iron this year than India, and that she has ranked next to Russia as our third best customer.

The cause of this remarkable state of things is the great and rapid improvement which has taken place this year in Canadian railway credit. The substantial increase which has been established in the traffic receipts of the Grand Trunk of Canada, the Great Western of Canada, and the Northern of Canada Railways has induced a more hopeful view to be taken by English capitalists of Canadian railway prospects, and capital required for Canadian extensions has been freely offered in consequence. This fact has, of course, revolutionised the aspect of the Canadian railway interest; for years it has been struggling against adversity, and hoping almost against hope, but something like prosperity appears to be at last either enjoyed or in prospect. The greatest energy is accordingly being displayed in the prosecution of extensions, and even a Canadian Pacific line has been officially projected. This latter enterprise has not yet advanced beyond the survey stage, but it is stated there will be no difficulty in obtaining men and capital to push on the road when the Government is prepared to award the contracts. The Intercolonial Railway, which has been on hand for the last twenty months, has, of course, absorbed a large quantity of rails and other material, while some heavy iron bridge work has to be executed to carry the line over the Metis, the Restigouche, the Miramichi, the Nipissiquit, and the Folly rivers. The Great Western Railway Company of Canada is engaged upon the construction of an air line, and several other smaller railway enterprises are also on hand in the Dominion, such as the Canada Central extension from Sand Point, the Toronto, Grey, and Bruce, the Wellington, Grey, and Bruce, the Midland of Canada extension from Beaverton to Georgian Bay, the Toronto and Lake Nipissing, the Toronto, Simcoe, and Muskoka Junction, &c. All these lines have, of course, absorbed more or less considerable quantities of rails and accessories, and a large demand for steel rails has further prevailed in connection with the renewal of the great existing Canadian lines. The introduction of steel rails upon such a line as the Grand Trunk of Canada, bids fair to exert a great effect in future years upon the condition of such an undertaking, as if the working expenses can be reduced, while the profits are increased, the capital engaged in the enterprise, which has thus far remained almost entirely unproductive, will soon be fairly remunerated.

The political and social condition of Canada is undergoing great changes; hence the solid improvement which has been witnessed in Canadian railway property. Although Canada was secured by conquest by the English in 1764, it was not until 1867 that the scattered British American provinces were united in one great Confederation or Dominion. Four years have been consumed in the execution of the Act of 1867, which authorised the formation or establishment of the Dominion, but the work is now very nearly completed, and the result will doubtless be reflected in an improved administration of Canadian affairs. It is noticeable that although 107 years have rolled away since the English obtained the complete control of Canada, British America has now only a population of about 4,000,000. The important question of immigration was for a century almost entirely neglected by the Canadian authorities, and intending settlers in Canada had to find their way there almost in spite of every obstacle. Now all this is changed. Every effort is being made to attract immigrants to Canada, and although many difficulties had to be overcome, still some success is achieved. Thus 10,091 immigrants remained in Canada in 1866; in 1867 the number rose to 14,666; in 1868 it sunk to 12,765; but in 1869 it advanced to 18,630; and in 1870 to 24,706. Population in Canada implies material progress and the development of wealth; and with more inhabitants there must not only be more traffic upon existing Canadian railways, but there must also be a cry for more new lines. Hence there is a prospect of a good continued demand for British railway iron in Canada.

OUR MINERAL STATISTICS.—We understand that the "Mineral Statistics of the United Kingdom," although far advanced, are delayed for a short time, owing to the illness of Mr. ROBERT HUNT, F.R.S. We trust that his contemplated withdrawal from active business pursuits will speedily restore Mr. Hunt to health, and enable him to complete his valuable volume of statistical information.

STEEL.—The exports of unwrought steel from the United Kingdom during the 15 years ending with 1870 inclusive were as annexed:—1856, 21,858 tons; 1857, 22,374 tons; 1858, 16,378 tons; 1859, 24,744 tons; 1860, 32,173 tons; 1861, 21,810 tons; 1862, 25,779 tons; 1863, 28,687 tons; 1864, 26,834 tons; 1865, 23,877 tons; 1866, 34,413 tons; 1867, 32,685 tons; 1868, 31,362 tons; 1869, 33,560 tons; and 1870, 34,911 tons. The value of these exports was as follows:—1856, 735,823*l.*; 1857, 748,579*l.*; 1858, 589,676*l.*; 1859, 805,832*l.*; 1860, 986,228*l.*; 1861, 726,956*l.*; 1862, 848,933*l.*; 1863, 935,517*l.*; 1864, 890,395*l.*; 1865, 782,129*l.*; 1866, 1,124,917*l.*; 1867, 1,065,614*l.*; 1868, 1,009,342*l.*; 1869, 1,040,707*l.*; and 1870, 1,105,401*l.* This branch of British exports is thus slowly—but only slowly—expanding.

FRENCH TIN AND CINNABAR.—An important mineral discovery has recently been made by Mr. S. DUBOS, C.E., of Eaux-Chaudes, in the Lower Pyrenees, France, whilst carrying on the mining operations in which he is engaged there. In addition to an important discovery of blende, he has met with a very valuable mineral vein, containing the sulphurets of nickel, cobalt, and mercury, in combination with oxide of tin. This mixture of the four species of metalliferous mineral mentioned is almost unknown, except in an analogous nickel and cobalt mine, which is very profitably worked at Dobschau, in Upper Hungary, where the gangue is of diorite and serpentine. In the Pyrenees vein, which has been opened upon in two places, the gangue is also diorite. The proportion of the several minerals in the vein varies considerably, but in all parts would

well pay for extraction; the cinnabar, for example, goes from 8*½* to 96 per cent.; the nickel from 17 to 35 per cent.; the cobalt from 6 to 40 per cent.; and the tin from between 5 and 6 to 28, and in some places, even 45 per cent. The samples have been taken chiefly from the outcrop, and from various places within a distance of three miles, which readily accounts for the wide differences met with. The veins are of great thickness, varying from 7 ft. to nearly 18 ft., and there is one vein of cinnabar which is no less than 26 ft. thick. They have a favourable inclination for working, and from their position with regard to the bottom of the adjacent valleys, they could be worked by levels without necessitating expense for sinking shafts, or for special machinery for unwatering the mines. These deposits will be more fully referred to as soon as they are more extensively developed.

AMERICAN IRON TRADE.—It is stated that the total production of pig-iron in the United States in the year 1870 was 1,800,000 tons, and that 200,000 tons were imported, almost exclusively, from the United Kingdom, giving a total of 2,000,000 tons for consumption.

THE VAN MINE, AND ITS PROSPECTS.

Little more than two years have passed away since this now famed mine became the property of the present company, after an anxious and unsuccessful development, extending over a period of something like twelve years. During that long interval, protracted, doubtless, by reason of private capital being inadequate to a vigorous development of the property, various difficulties and vicissitudes occurred, threatening at times the abandonment of the enterprise—indeed, the owners or their representatives, dispirited at the apparently ceaseless and fruitless outlay, more than once suggested that course. When it had been determined upon, Captain Williams, the present able manager, feeling so satisfied that it would yet prove a great mine, offered to continue its development with his own private capital, which was accepted under certain conditions. Had not Capt. Williams assumed this bold and enterprising attitude at this most critical juncture in the history of Van, it is by no means improbable its enormous wealth would have still remained unknown and undeveloped.

A casual perusal of the unpretending monthly reports from Capt. Williams, which appear in the columns of the *Mining Journal*, altogether fails to convey anything like an adequate idea either as to the exceptional rapidity with which its teeming resources are being unfolded, or the magnitude of the wealth already discovered. Who would imagine, for instance, from those very modest documents, that at the present time, irrespective of the "reserves" continually increasing in the ratio of ten times the quantity of ore returned, there is lead actually discovered to the value of more than 2,500,000*l.*, while the reserves of blende, computed at 22,488 tons, may fairly be valued at between 60,000*l.* and 70,000*l.*? These large figures are in no way indicated in the official reports of the manager, yet they are confirmed by the supported practical evidence of Captain Arthur Waters (of Roman Gravel and Tankerville), who, in making these computations, takes no credit whatever for discoveries made and to be made outside the prescribed or specified 137 fathoms of ground lengthwise, although many valuable developments have taken place beyond that limitation, both east and west; for example, the rich lode recently intersected in a winze sinking below the 15, 45 fms. east of shaft, where the ore is perfectly solid. Moreover, in these 137 fms., the width of the ore is calculated at only 5 fathoms. These facts are sufficient to show that the present monthly returns (amounting during the past half-year to 2600 tons of lead and 600 tons of blende, realising 34,588*l.*) are limited only by the producing appliances at command. These, however, are being rapidly extended, and the time is not far distant when the returns will not be far short of 1000 tons per month. Practical testimony, indeed, affirms that already sufficient ground has been opened, and that the lode is rich enough to supply this quantity at the present time, but that it would be unwise to do so until the new shaft be down, and the arrangements completed for winding through it from the 45. It need hardly be mentioned that the profits will increase in a much greater proportion than the returns so soon as the working plant shall have been brought to a scale equal with the ore-yielding capabilities of the mine, simply because the "dead" charges, necessarily very great upon a property of such dimensions, will be spread over a larger production, and the completion of a line of railway to the dressing-floor has, of course, proved a most valuable auxiliary in the economic development of the mine.

The able manager well deserves the graceful tribute paid to his practical skill by an experienced authority, when he says that, great as may be the skill with which the underground department is conducted, nothing can surpass the way in which the splendid engines and machinery for pumping, winding, stone-breaking, and crushing, as well as the great variety of unique appliances for classifying, washing, and making the ore marketable, are arranged and constructed. Reviewing every feature in connection with the development of this truly wonderful mine, remembering that in the short space of less than three years, despite many difficulties and hindrances inseparable from the initiative operations of a property of such extent, it has yielded ore which has realised about 130,000*l.*, and having during that short period paid in dividends the sum of 60,000*l.*, or 10,000*l.* more than the original capital, there is certainly every ground for the statement that Van is a mighty problem, and that no miner of intelligence who has watched the development of the great lode from adit downwards can fail to see that as yet a few scratches only have been made upon the outer rim, or crust, the mere outcrop of the immense body of ore which the shaft will disclose at 120 fathoms deep.

The monthly sale amounted to 450 tons of lead ore at 12*½* s., and 100 tons of blende at 3*½* s. 6d. per ton.

THE COAL TRADE OF LABUAN.

The mineral resources of Labuan have been handsomely recognised in the speech of Governor Pope-Hennessy on opening the Session of the Legislative Council. When His Excellency accepted the position of Governor he found the colony in a bankrupt condition, the taxpayers of the United Kingdom bearing more than half the cost of the civil establishment of Labuan, and a still heavier burden in respect of its military expenses, and to use the Governor's own words, "the mineral resources of Labuan had a reputation almost as bad as the finances." For twenty years the lessees of the coal mines had failed in the first elements of commercial success; they had been unable to get a wharf and other facilities for putting coal on board the steamers in the only safe anchorage in the colony—that of Victoria Harbour; and they had failed in getting a really good character for the Labuan coal. He explains that the directors and managers were not to blame for this; the coal company had been systematically disencouraged by some in Labuan, and His Excellency had the good fortune of being present in the Colonial Office in 1867, when Sir Charles Adderley, then Under Secretary of State, received a deputation by Sir James Elphinstone, who explained in a few practical words the sort of assistance the local Government should give to the colliery. Sir James Elphinstone's suggestions were the basis of the policy which the Governor had adopted.

The scheme of employing convicts in connection with the colliery has proved to be entirely successful. In former years, for want of men, the coal hewers were often taken out of the pits to load the steamer, to repair the over-ground roads, and to do many jobs foreign to their special work. Thus the advantages of a steady vision of labour were lost. Since the introduction of convicts the manager has been able for the first time to train an efficient body of hewers, who can now turn out clean-cut coal in large blocks. With the skill of the workmen the reputation of the coal increased, and the result is that the quality of the Labuan coal is not only higher than that of any other coal raised in the East, but it can bear comparison with the best English coal. Some recent trials of the Peninsular and Oriental Company's steamship China, proved highly satisfactory for the Labuan coal in every way, Mr. J. Dunlop, the chief engineer, reporting that, compared with English Newcastle coal they obtained the same rate of speed for same rate of coal.

sumption. Compared with Lancashire and North Wales coal they obtained a higher rate of speed ($\frac{1}{2}$ a knot) for same rate of consumption. Compared with South Wales coal to obtain the same rate of speed (8 knots), they used 10 per cent. less; and by mixing in equal quantities with the small South Wales coal, they maintained the 8-knot speed. They then used the small South Wales coal by itself and only obtained a speed of 6 knots. The engineers in charge of each watch and also their firemen speak in the highest terms of the Labuan coal.

By convict labour the coal company have been enabled to construct a good wharf in Victoria Harbour, with a solid abutment of stone 130 ft. long and 36 ft. wide, with rows of piles 1 ft. 3 in. diameter, iron bolted, and thrown out an additional length of 93 ft. Since the beginning of the present year the Spanish mail steamer *Mindora* has regularly called to coal on her way from Singapore to Manila. The moment she is alongside the wharf the convicts run on board with baskets of coal, and the captain states that there is no port in the East where he is now coaled with greater facility than in Labuan. The local manager recently completed his survey of the proposed railroad from the mines to the wharf, and he is now submitting it to the board of directors at home. The only railway bridge required—that over the Gangarra river—where a distance of 136 ft. had to be spanned, was completed last year, under the superintendence of the Surveyor-General.

When it is remembered that there are 200,000,000 tons of workable coal in this island, and that it is midway between the great centres of commerce in the East, it will not be denied that such a report as that from the Peninsular and Oriental steamship China, and such facilities for obtaining coal are deserving of public attention. Already this really good coal is sold at the wharf in Victoria Harbour for \$5 a ton. Coal of inferior quality is brought from England to Singapore, Hong Kong, and Manila, where it is sold at from \$10 to \$14 a ton. The traffic through the Suez Canal is tending to raise the price of English coal in the East, whereas the improvements in Labuan, the completion of the railway and of the deep shaft, to which a large share of the colliery labour is now devoted, will tend to diminish the prime cost of Labuan coal; and Mr. Pope thinks it probable that within the next three years the Labuan coal will be profitably sold at \$3 a ton. Those who know the high prices paid by the Peninsular and Oriental Company and by the officers of the Royal Navy for coal in the China Sea will see in the facts he has stated some answer to the question as to the compensation Labuan may be expected to give for a quarter of a million.

Anything that can diminish the expense of that most valuable mercantile squadron, the steamships of the Peninsular and Oriental Company, will be a public benefit; and whatever can tend to reduce the lavish outlay on that costly fleet, the vessels of Her Majesty's Navy on the China station, will be a direct relief to the British tax-payer. Thus, year by year, Labuan will be repaying to England her 260,000. Indeed, that sum will probably be recouped in less than half the number of years it took to spend it. Nor is this the only advantage England derives from this little colony. Labuan is steadily fostering a valuable trade in gutta-percha, india-rubber, bees-wax, sago, and other articles, the demand for which is increasing at home. The treaty between Her Majesty Queen Victoria and His Highness the Sultan of Borneo has enabled the British Government, through the influence of this settlement, to assist in spreading a Chinese population along the coast of Borneo.

REPORT FROM SCOTLAND.

Aug. 30.—The high price of warrants reported last week has not been maintained. The tone became quieter at the end of the week, and the price gradually receded until it touched 62s. 1½d. on Monday. Yesterday there was again a slight rally, and 62s. 6d. was paid. To-day the tone has been unaccountably flat, with iron rather pressed for sale, and buyers exceedingly cautious. Beginning at 62s. 9d. one month, the price declined rapidly, closing sellers at 61s. 9d. cash, buyers at 61s. 7½d. Comparatively little done. The present reaction may be attributed partly to selling by speculators who have been holding iron since the panic of last year, and the uneasy aspect of continental politics, but chiefly to the small export return which has been made this week. Low prices cannot be looked for at present, but a little reduction from the rates of last week only shows a natural and healthy market. The Monkland Company are erecting another furnace, with the Ferrie improvements; and it is said several new furnaces are to be erected at Lugar, in Ayrshire. There is little alteration in the quotations for makers' iron, the No. 3 quality is rather more plentiful, and more easily bought:—

G. M. brands at Glasgow (deliverable alongside) ..	No. 1.	No. 2.
Guthrie & Co. ditto ..	62s. 6d.	61s. 0d.
Coltness ditto ..	62s. 6d.	61s. 0d.
Summerlee ditto ..	62s. 6d.	61s. 0d.
Carbunro ditto ..	62s. 6d.	61s. 0d.
at Port Dundas ..	62s. 6d.	61s. 0d.
Langloan ditto ..	62s. 6d.	61s. 0d.
Calder ditto ..	62s. 6d.	61s. 0d.
Glenarmock at Ardrossan ..	62s. 6d.	61s. 0d.
Dumfries ditto ..	62s. 6d.	61s. 0d.
Edinburgh ditto ..	62s. 6d.	61s. 0d.
Carron at Grangemouth ..	62s. 6d.	61s. 0d.
ditto (selected) ditto ..	62s. 6d.	61s. 0d.
Shotts ditto ..	62s. 6d.	61s. 0d.
Kinnell at Boness ..	62s. 6d.	61s. 0d.
G. M. brands at Middlesbrough ..	62s. 6d.	61s. 0d.
Bar iron ..	62s. 6d.	61s. 0d.
Nail rods ..	62s. 6d.	61s. 0d.

For the week ending Aug. 26, 1871 ..	Tons	12,585
Aug. 27, 1870 ..	Tons	12,528
Increase ..		57

Total Increase since December 25, 1870 .. 126,328

In Malleable Iron not many orders have been placed since our last account of the advance, especially as merchants had protected themselves to some extent by buying forward; but the paying of the advance is only a question of time, as the prospective orders are numerous, and higher prices are more likely to prevail than lower during the remaining months of the year. All the makers seem to be taxed to their utmost powers of production, and some of them are extensively importing puddled bars from England, Govan getting much from this source as they are producing themselves. The iron-moulders here have been compelled to refuse several time contracts, their hands being already quite full, but we understand they have been taken up by Leith and Dundee firms, the latter of whom we find themselves deficient of men for their engagements. Iron-moulders are in demand here, and cannot be had. We have it also a good authority that about 15,000 tons of iron vessels have been sent in the Clyde this week. Several new works are about being erected in the neighbourhood, but where are the men to come from to fill them?

The very active general demand for Coal for all purposes would have enabled coalmasters here to have advanced prices, but the settlement of matters in England and Wales has prevented them from clearing an advance just yet. From the North the shipments have been very heavy to the North German and other Baltic ports, and from the Scotch ports generally to North and South America, the Mediterranean, &c. From the returns of the quantity of coal shipped, foreign and coastwise, for the week just ended we note 40,575 tons, against 30,129 tons in the corresponding week last year. This brings the total shipments for the month of August to 201,592 tons, against 165,985 tons in the same month last year, showing an increase for August this year of 35,607 tons.

The miners in the Kilmarnock district are agitating at present for an increase in wages to the extent of 6d. per day. Deputations were appointed to wait upon the masters on the subject report that they are favourable to the advance, and hopes are entertained that it will be granted by the masters. The miners in the other districts are waiting their opportunity of bringing their right to an advance on account of the very prosperous state of coal and iron trades in all their branches.

The shipwrights in the Glasgow district have struck work for an increase of wages, and on Monday evening they unanimously resolved to carry out the strike with firmness until the advance was conceded to them. This strike is expected to extend to the whole of the Clyde shipyards, but in Dumbarton the masters informed their hands that they would get the advance as soon as it was paid in Glasgow, and the men still continue working. The wages for some time past have been at the rate of 5s. 4d. an hour, about 22s. 7½d. per week; and the demand now made by the men is that they should be paid at the rate of 6s. an hour, or 28s. 6d. per week of 57 hours. The masters made an offer of an advance of 1s. 6d. per week for 60 hours, but

these terms the men refuse to accept, and to the number of about 900 they have struck work. Under these circumstances the masters have adjourned sine die, and have no intention of holding any meeting for some time to come. The only yard in which the increase has been given is that of Messrs. Tod and Macgregor's, Meadowdale, Partick.

SUPPER AND PRESENTATION.—A most enthusiastic and happy meeting of the workers in Heathyknowe Colliery took place in Mrs. Waddell's hostelry, Bargeddie, for the purpose of manifesting their respect for their manager, Mr. THOS. GIBB, and his amiable partner, Mr. W. Lockhart (engineer) was called to the chair, and Mr. Mathie (storekeeper) discharged the duties of croupier. Supporting the chair and vice-chair were a number of gentlemen, several of whom held official positions in similar works in the neighbourhood. After the disposal of the loyal and patriotic toasts, the Chairman called for a special bumper for the toast of the evening, and introduced Mr. Gilbert, who, in a few well-chosen remarks, presented Mr. Gibb with a massive gold watch and chain for himself, and a similar gift for Mrs. Gibb. The watches, &c., were beautiful specimens of the goldsmith's art, and were valued at about 50l. that for the manager bearing the following inscription:—"Presented by the workers of Heathyknowe Colliery and friends to Mr. Thomas Gibb, manager, as a token of their respect and esteem, Aug. 24, 1871." In returning thanks, Mr. Gibb said he rejoiced that, after six years' experience of his management, the workmen had deemed him and his partner worthy of such substantial tokens of their regard, and hoped he would long be the means of maintaining that friendly intercourse between employer and employed which was of so much consequence to both. [A Voice: "Aye, it's no every manager that's up at four in the mornin' a'way the snaw for their men!"] (Prolonged cheers.) The other toasts included "The Heathyknowe Coal Company," "Mr. Alexander, Government Inspector for the District," "The Press," &c. The meeting was a very pleasant one, and the happy party broke up at a seasonable hour, very much delighted with the proceedings of the evening.

TRADE OF THE TYNE AND WEAR.

Aug. 31.—There has been an ample supply of vessels in these rivers lately, many of them very large; indeed, the small class of colliers and other vessels are rapidly disappearing, and large steamers and clipper are taking their places. The imports into the Tyne continue on a large scale. Esparto grass for paper making is now stocked in enormous quantities at Tyne Dock, and the imports of timber, chiefly for colliery purposes, have also been on a large scale lately. The exports of coal also continue very great. There is a plentiful supply of ships, and turns for sailing vessels continue long, from a fortnight to three weeks being the ordinary time they have to wait. All the colliers continue to be well employed, and the demand for coking and steam coal is very good. The demand for house and manufacturing coal is scarcely so great as it has lately been.

The Iron Trade continues active, most of the works doing well, both for owners and employees. The great works at Consett are doing a good and profitable business, immense quantities of rails of the largest size, and ship-plates, &c., being turned out there. At Jarrow they are doing well in all branches, there being a good demand for pig-iron and all the other goods produced, and several large vessels are on the stocks. There is no want of work here in all branches, and, to show the demand that exists for workmen, we only need to state that 4s. per day is offered for unskilled labourers, and there is a difficulty in getting a sufficient number. Jarrow continues to increase and improve most rapidly, and the streets are well paved, cleaned, and lighted. There is an excellent market place, and several handsome churches and chapels. The new railway station here is far advanced, and the direct line from Pelan, connected with the North-Eastern, will soon be opened, which must vastly improve Jarrow. There is no doubt that long before the next census is taken Jarrow will be a town containing from 25,000 to 30,000 inhabitants, and it must, of course, become a corporate town, and send at least one member to Parliament. Most of the iron and engine works are doing well. Of course, those who are involved in the disastrous strike have been much curtailed in their operations. The new works of Messrs. Richardson and Co., Gateshead, are doing a large amount of work. The foundries of Messrs. Abbot and Co. have been entirely stopped by the strike, but they have now been started, many of the old and most skilled hands having gone in, and many of the men at Hawks and Co.'s works have also gone in.

The engineers' strike still continues—that is, part of the men are still in the locality, and living on the contributions that can be got from their fellow-workmen in this and other localities—but a very considerable number who came out on strike have obtained work in other places, and the masters are filling up the works very fast from other districts and countries. A considerable number of good men have been obtained from Cornwall, many have also been got from the Thames, but some of them are very inferior workmen. A large number of men have been got from Belgium and Denmark, and as a rule these are good skilled workmen. A few have been this week induced to leave the works of Sir Wm. Armstrong, but this will not affect the main result.

COAL-CUTTING MACHINERY.—This mode of cutting coal has made but little progress here; various machines have been tried, but they have not proved successful hitherto. The question may, therefore, be considered to have been held in abeyance for some time, so far as this district is concerned; while, at the same time, it appears that various machines have been tried in other districts, and there they have been tolerably successful. So long as labour was plentiful, and consequently cheap, this question could hardly be expected to secure the attention it deserved, as there is always considerable difficulty, and also extra expense to be met in the introduction of any thing entirely new, whatever may be the intrinsic merits of the machine. But as labour is getting scarce and dear, the introduction of machinery in the working of coal cannot be much longer delayed; at any rate no exertion will be spared in order if possible to get them profitably worked. Lately some of those machines have been introduced at the Hetton Collieries, and they are now daily working, and it is intended to introduce several more shortly. It appears that each machine holes or curves 30 yards in length and upwards of 3 feet inwards in 12 hours, which is equal to the work of several good workmen. Compressed air is used for working the machines, an engine on the surface compressing the air, which is then conveyed down the shaft and into the point where the coal-cutting machine is placed by means of pipes. It appears that the machines are giving much satisfaction—one important point being that the coals produced are larger, and much less small coal is produced, than by the ordinary method. This of course, is one of the most powerful arguments in favour of their introduction—as remarked above, several more of those machines are to be introduced at Hetton, and we will give a more detailed account of them shortly.

UNDERGROUND FURNACES.—Another new invention in mine engineering has received much attention lately—that is, the precipitating or condensing of smoke and gases from underground furnaces. The object of this invention is to enable the mine engineer to place an engine at any point underground, at a distance in the workings from the shaft, and also to generate steam at that point to work the engine. Now this object has to a considerable extent been obtained, and engines are worked in this manner, and although the smoke is passed into the workings, generally the returns, yet little or no inconvenience is felt, as the products of combustion have been condensed by means of pipes surrounded by water, &c. This is a very important invention, as horses must be dispensed with as much as possible underground; and if the smoke can be thus rendered harmless, what further obstacle is there to the introduction of the locomotive in the levels underground, which has been long desired?

NEWCASTLE INSTITUTE OF MINING AND MECHANICAL ENGINEERS.—A general meeting of the members of this Institute will be held in the lecture room of the Literary and Philosophical Society, on Saturday next, when a good attendance of members is expected. The secretary will read the proceedings of the Council, after which a large number of gentlemen stand for election, having been nominated at the last meeting. The following paper will be read:—"On the Method of Working Coal by Long Wall at Annesley Colliery, Nottinghamshire," by Mr. Henry Lewis. And also a report will be read from the committee appointed to classify the riveting experiments. There is no subject connected with mining of more importance than the mode of working coal; and as long wall working is but little understood here, much interest is always felt in any account given of that mode of working. A good meeting is expected. A paper is also shortly to be read by Mr. Bunning, the secretary, "On a Continuous Indicator." The necessary experiments have been going on now some time at Messrs. Black, Hawthorn, and Co.'s Works,

Gateshead, but are not yet completed. A full report of the proceedings will be given in next week's Journal.

REPORT FROM THE NORTH OF ENGLAND.

Aug. 31.—The commencement of the visit of the Iron and Steel Institute at Dudley on Tuesday had the effect of drawing away some of the leading ironmasters who usually attend the weekly market at Middlesbrough. There was, nevertheless, a good attendance. For pig-iron the same quick demand was observable that has characterized the market for the past few weeks. No. 3 iron is quoted at 50s. 1s. per ton, net cash, f.o.b. at makers' works, but in two or three special cases 1s. per ton more than the latter quotations was offered for this quality for immediate delivery. Masters, however, have their work set to fulfil their present engagements, and are not, therefore, at liberty to accept new contracts, except for forward delivery, and consequently there are not many transactions reported. Continental demand is brisk, and the universal briskness of firms engaged in the manufacture of finished iron creates an active demand at home also. Deliveries during the past week have been pretty heavy both by sea and rail. The new furnaces in course of erection in the Cleveland district are being pushed on with considerable rapidity, and some of them will be in blast very shortly. The new furnaces of Messrs. Holckow, Vaughan, and Co. (Limited), of Eton, will be blown-in in the course of two or three days now, and the Lackenby Iron Company, near Middlesbrough, intend commencing their two new furnaces almost directly. The Ferry Hill and Rosedale Iron Company have started with the erection of two new blast-furnaces at Ferry Hill, which are to be, when finished, 35 ft. high and 32 ft. in the bosh. They will be fitted up with all the latest improvements.

Manufactured iron makers are busy. There are a few good enquiries for rails, and firms are reported to be generally well supplied with orders. For plates the demand continues strong, and bar-iron makers are pressed for the completion of shipping orders.

Mr. Waterhouse, the accountant whom Mr. Hughes, M.P., sent down here to look into the accounts given by the masters in the recent enquiry into the wages question, has been at Middlesbrough this week. We are given to understand that wherever he has been any differences he has found have been small, and very unimportant. He calculates to be able to complete his investigation, and make his report, within a very short period.

In the Coal Trade there is nothing new afloat. The collieries in the South Durham district are all in full work. For house coal the demand is comparatively small, but for manufacturing purposes business is very brisk.

REPORT FROM MONMOUTH AND SOUTH WALES.

Aug. 31.—As compared with a few weeks ago, the Iron Markets are again beginning to show a little more animation. Railway iron is not quite so much in request for the United States just now, although the clearances effected during the past week from the local ports have been on a tolerably extensive scale. The steelworks now in existence in Monmouthshire and South Wales are busily employed on contracts for Canada, and each week brings fresh evidence that if the works were more extensive ample work could be found for them. The erection of new works at Landore, near Swansea, are being pushed forward vigorously, and extensions and improvements are still being carried out at the other establishments. Continental business must be pronounced quiet, but it is said to act to note improvement in Russian prospects. There are now signs of an extensive trade being done in railway iron between this district and the Muscovite Empire next year. As was expected, orders are beginning to come to hand as the season draws to a close, and in all probability an extensive delivery to the Baltic ports will be commenced early next spring. Bars are in request for Turkey, Greece, and other southern continental markets. Plate-makers are busy on home and foreign markets. The production and consumption of pig-iron is on a very large scale. Prices still show an upward tendency. Tin-plate makers are well employed, there being no difficulty in securing orders or prices. The works show considerable activity.

Things have re-started satisfactorily in connection with the Steam Coal Trade. The hopes entertained last week as to the termination of the strike have been fully realised. It was at first, however, feared much that the arrangements made by the delegates would be upset by a disappointed few, but happily the good sense of the majority of the colliers prevailed, and they willingly gave their assent to the agreement, the terms finally agreed upon being identical with those reported last week. A meeting of the representatives of the men and masters took place on Monday, and arbitrators were selected. Mr. Bidder being named by the masters, and Mr. A. McDonald, the president of the Miners' Association, was nominated to act on behalf of the colliers. These gentlemen had, it appears, been previously communicated with, and no time will be lost in commencing the arbitration. A very important point will be the choosing of an umpire, and although many eminent names have been mentioned it is premature yet to say anything respecting the matter. The arbitrators will, no doubt, select a gentleman who by his position and knowledge will be fully competent to decide any differences, if any, that may arise. At the commencement of the strike the men made a great point of the probable damage that would be done to the collieries if they were to remain out a length of time, but the reports published as to the actual state of the pits this week show that no extensive damage has occurred, but rather it appeared that all the pits had been kept in such a splendid state of order that the hands have been able to resume work in nearly all places without the slightest delay or difficulty. The quantities of coal sent down for shipment at the ports have not, perhaps, been quite so large as was expected during the week, as many of the men did not work on Monday, still the supplies are increasing daily. The orders on the works will keep trade active for some time to come, and there is a fair current demand on account of the leading foreign markets. For home coals the demand on home and coasting account is quite equal to the average for the time of year.

The resuscitation of the Gnoil Collieries, near Neath, is being vigorously proceeded with. The powerful pumping-engine which has just been started extracts something approaching 100,000 gallons of water from the workings daily, and from soundings it is found that the vast quantity of water which has lain in the pit, completely drowning the workings, is rapidly diminishing. Preparations are being made for the erection of other new machinery, for the purpose of sinking the old shafts to greater depths.

The Western Mail says the period of inactivity enforced upon the colliery owners in the Rhondda Valley by the recent strike has not been altogether unproductive. Since the "Lung-on" of the men on June 1, the Aberkerry Colliery Company have been engaged in improving the workings by deepening the shafts of their pit at Treorkey. On Tuesday the excavators employed in this work came upon a new seam of coal, which is spoken of as being of splendid quality. The discovery has been the source of much rejoicing in the town of Treorkey.

Considerable inconvenience has been experienced at the Dowlais Rail Works this week, consequent upon about 40 rail straighteners having refused to work unless an advance in their wages be conceded to them. The strike commenced on Monday, and has not been arranged up to the time we write. The work allotted to these men does not require any particular skill, still their refusal to work interferes seriously with operations in other departments, and the dispute should, therefore, be arranged as soon as possible. The Dowlais Company are well known to always deal liberally with all their workmen in regard to wages, and especially with those engaged in the rail branch, and it is hard to think that the men in question have any ground for complaint that could not at once be set right.

The arrivals at Swansea include—the *Ada Letitia*, from Bilbao, with 175 tons of iron ore, for J. Brogden and Sons; *Serretira*, from Lisbon, with 145 tons of copper ore, for Richardson and Co.; *Elaire*, from Bilbao, with 500 tons of iron ore, for Forester and Co.; *Oscola*, from Bilbao, with 320 tons of iron ore, for W. H. Tucker; *Adonis*, from Bilbao, with 180 tons of iron ore, for Tucker, Smith, and Co.; *Faithful*, from Bordeaux, with 180 tons of pitwood, to order; *Julia*, from Bilbao, with 200 tons of iron ore, for W. H. Tucker; *Moro*, from Bordeaux, with 300 tons of pitwood, for Richards, Power, and Co.; *Sunshine*, from Bilbao, with 330 tons of iron ore, for H. Bath and Son; *Gem of the Sea*, from Cagliari, with 310 tons of calamine, to order; *Ocean Queen*, from Bilbao, with 200 tons of iron ore, for Holway Brothers; *Rosa Madre*, from Carlaforte, with 940 tons of zinc ore, for H. Bath and Son; *Eliza*, from St. Malo, with 108 tons of zinc ore, to order.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Aug. 31.—Of late years the lead districts of Derbyshire have not made much progress, for although they are about the oldest we have, still vast and valuable deposits are yet untouched. Though there are now open, worked and unworked, about eighty mines, the produce is not more than at the rate of about 7000 tons of lead ore per annum. One of the great drawbacks, no doubt, has been the want of railway accommodation in several localities, but we understand that an effort will be made next session to connect the lead mining districts with the Derbyshire coal field. If for Tucker, Smith, and Co.; *Faithful*, from Bordeaux, with 180 tons of pitwood, to order; *Julia*, from Bilbao, with 200 tons of iron ore, for W. H. Tucker; *Moro*, from Bordeaux, with 300 tons of pitwood, for Richards, Power, and Co.; *Sunshine*, from Bilbao, with 330 tons of iron ore, for H. Bath and Son; *Gem of the Sea*, from Cagliari, with 310 tons of calamine, to order; *Ocean Queen*, from Bilbao, with 200 tons of iron ore, for Holway Brothers; *Rosa Madre*, from Carlaforte, with 940 tons of zinc ore, for H. Bath and Son; *Eliza*, from St. Malo, with 108 tons of zinc ore, to order.

The business doing in Coal by the Midland Railway is good for the season, and a large tonnage is being forwarded to London from Clay Cross, Codnor Park, Eckington, Sheepbridge, and Staveley. The demand just now is for steam qualities, but about an average business for the period of the year is being done in household. A considerable quantity of gas and other coal is being forwarded to Birmingham, Worcester, and to other places to the west. The ironworks in the neighbourhood of Chesterfield, and on the Erewash Valley route, are doing very well, the Midland directors of late having shown a disposition to give every facility, by means of branch lines, for developing the minerals on their railway, and in that respect there is probably no coal district more favourably placed. In the adjoining counties of Notts and Leicester business is in a favourable state. The Stapleford Colliery, near to the Stanton Gate Station of the Keworth Valley Railway, has been formed into a limited company, with a capital of 20,000l.

Almost every branch, more especially the heavy ones, of the Sheffield

field trade is now busy, there being improved demand on American and continental account. Makers of every description of railway material are very active, and the plate-mills are being fully worked, as those engaged in rolling the heavy armour-plates. Tyres, crank-axes, and edge tools are in brisk request, and there is a good enquiry for malleable iron, the well-known firm of Crowley and Sons, of the Kelham Works, about the largest concern in the kingdom, and who are celebrated for their productions, are busy in all departments. They are about to remove to their new and spacious premises at Meadow Hall, where their productive power will be greatly increased. There is more doing in files and general castings, and all the makers of Bessemer are doing well, orders being in advance of the ability to supply in many instances. The works at Rotherham, both iron and brass, are favourably off, there being at the present time a rather brisk demand for plates, weldless tyres, and stove and other castings. At Thornecliffe and Chapelton trade is good in gas and water pipes, stoves, grates, and ornamental castings for builders. The coal pits of the firm of Newton, Chambers, and Co., are all doing well, whilst a very large tonnage of coke is being made, and for which there are ready markets. The business doing throughout South Yorkshire in steam coal was scarcely ever better than at present, and a large tonnage is being sent to London, and also to Hull and Grimsby for exportation. House coal is quiet, but there is a considerable trade being done in Silkesones for gas-making purposes.

The South Yorkshire Miners' Association have their annual demonstration on Monday, which this year is to be held in the Queen's Grounds, Barnsley. To give due effect to the gathering, there are to be no less than 20 bands of music, and a vast display of elaborately figured silk banners. The different lodges are to be billeted at the public-houses, and preparations have been made for supplying the necessary creature comforts for 8000 men, exclusive of the ladies who generally accompany their "masters" to the great festival.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Aug. 31.—The ironmasters of North Staffordshire, at a meeting held on Monday afternoon, passed a resolution declaring an advance at the rate of 10s. per ton in the price of finished iron. It was also agreed to advance the wages of puddlers 6d. per ton, and of millmen and other ironworkers 5 per cent. The wages of colliers and ironstone miners were also increased to the extent of the reduction made three years ago. The advanced scale comes into operation from 16th September. By these concessions a stop has been put to the disturbances in the labour market arising from agitation, which have been reported for some weeks past. The demand alike for pigs and finished iron is very brisk, a goodly number of shipping orders being in course of execution. Coal for manufacturing purposes is in active demand, and there is no diminution in the buoyancy of the ironstone trade, transactions being reported at somewhat firmer quotations. Very large quantities of ore are being sent to South Staffordshire and other districts.

This has been a somewhat unsettled week for business in the Iron Trade of South Staffordshire, owing partly to the visit of the Iron and Steel Institute, which has naturally absorbed a great deal of attention, and partly to the divided opinion prevailing among the ironmasters on the question of prices. We reported last week that Messrs. Barrow and Hall, dissenting from the resolution passed at the Birmingham meeting, had issued a circular announcing an advance of 10s. per ton. A similar step has been taken by other leading houses, including the Earl of Dudley; and virtually, though not officially, a rise of 10s. per ton in the list rates was declared on Saturday last, no transactions having been reported since that date, except at the advanced name. Business continues remarkably buoyant in all the principal departments of the trade. Best bars, hoops, small rounds, nail rods, sheets, and boiler-plates are particularly in active request. In rails there is comparatively nothing doing. All the pig-iron makers are supplied with orders sufficient to occupy them until the close of the quarter. Additional furnaces will be put into blast in the course of the next few weeks. For coal and slack the demand continues to be very fairly sustained. Ironstones of native produce are scarce and dear.

At a meeting of the Ironmasters' Association to-day the decision recorded in the following official communication was come to after a long and anxious deliberation:—A special general meeting of the Iron Trade was held this day with the view of considering the position of affairs, owing to the advance of some of the leading houses of the trade. At the meeting held last week it was determined to give a bonus of 6d. a ton to puddlers, the majority of the trade averring that at that time they had not experienced such an improvement in the demand as would warrant any advance in the price of iron. Seeing that a rule has been for many years in operation whereby the rate of wages is governed by the list price of iron, it is now considered that the same advance as usual should be given to the men—6d. per ton, plus 5 per cent. and 5 per cent. on all other forge and millmen's wages. The price of iron will, therefore, be from this day 8s. 10s. for bars, and wages 9s. 6d. per ton for puddling, and 5 per cent. advance on the rate of other forge and mill workers' wages, the advance to commence from the 16th inst.

The Hardware Trades of South Staffordshire are in a more prosperous condition than we have been able to report for some time past. For mill and forge machinery, and heavy wrought-iron work for engineering purposes, a brisk demand prevails, and the best makers at Wednesbury and Walsall have quite a pressure of orders for steam, gas, and hydraulic tubes. Hollow wares and builders' castings command a well-sustained export enquiry on the West Bromwich side of the district. At Tipton and Cradley the chain, cable, and anchor forges are all in active operation, the demand comprising Admiralty contracts as well as ordinary merchant orders. The lock makers are busy at Wolverhampton in the "levered" branches and at Willenhall in the "warped" branches of the trade, the colonial demand being particularly buoyant. Edge tools, vices, anvils, nails, washers, and other varieties of district produce are in full average request, and prices are firmer in proportion to the advance in the value of raw material.

NORTH STAFFORDSHIRE IRON AND COAL TRADE.—We are requested to state that the following resolutions were passed at a meeting of the North Staffordshire Iron and Coal Masters' Association, held at the Railway Hotel, Stoke-on-Trent, on Monday:—

"That puddlers' wages be advanced 6d. per ton, and millmen and others 5 per cent., and that such advances take effect at the expiration of 14 days from Saturday next."

"That the price of finished iron be advanced 10s. a ton."

"That, in cases where a reduction in colliers' and ironstone men's wages was made at the general reduction in 1868, such reduction be restored at the expiration of 14 days from Saturday next."

MINING BY MACHINERY—THE BURLEIGH DRILL.

It has already been observed that in ascertaining the merits of a machine, as compared with manual labour, it is essential that the amount of work done in a given period, extending over some months, should be taken, in order to make any reliable comparison; for whilst a run of a few minutes' or even hours' duration might give results immensely in favour of the machine, the result of a year's or a few months' working might show a great advantage in hand labour. It is in consequence of this that it has so frequently happened that drilling and tunneling machines which, in experimental trials, have been so successful as to secure the most favourable reports upon them, have been heard but little of in the mines; whilst of those which actually reached the mines, but one has been able to hold its ground after passing out of the hands of the inventor, who, being interested in getting through a large amount of work, will sometimes do so regardless of cost. The exception to which we have alluded is the Burleigh Rock Drill, which, we have already stated, has in a single year got through 225 fms. of hard conglomerate and 286 fms. of coal, the level being in each case 17 ft. by 9 ft., and, therefore, representing the removal of considerably over 2000 fms. of ground, the average exceeding the drifage of 180 fathoms per month, taking the 12 months' working.

In this country the result of such a lengthened trial is not obtainable, since the first machine made in this country was only sold in January last, and the sole manufacturers, Messrs. C. Ball and Co., of Newgate-street, have relied upon the merits of the machine alone, and have not in any case undertaken to work the machine themselves to prove its value, which has been the common practice of inventors of mining machinery. That obstacles inevitably attend the introduction of anything new is well known, and it certainly speaks well for the superiority of the Burleigh drill that whilst no sales are reported of other drills as the result of the inventors' experiments, Messrs. Ball and Co. have sold no less than thirteen drills in this country and abroad within the present year, Messrs. Ord and Maddison, of Darlington, being amongst the most recent purchasers of a drill for working their limestone quarries. We trust that these gentlemen will forward us the result of their experience with the machine as soon as they have had it a few months in use, as the public naturally place more confidence in the reports of those practically using machinery than in those of manufacturers or others interested in selling it. We are reminded of this fact by the perusal of a communication, obtained direct by the manager of the Etherley Colliery, near Darlington, from Mr. H. S. Dunn, of the Caprington Colliery, Kilmarnock, where we have already stated a drill is in constant work.

As a professional communication of this character would not come within the category of testimonials, one is inclined to attach additional importance to the statement. As to the amount of repairs required by the drill, Mr. Dunn states that he had it at work every day for ten weeks, and he considers that where there is much hard drilling the machine is of great service. Two similar pits were sunk, one by hand labour, through 21 ft. thickness of very hard whinstone in 1872 hours, and the other by the Burleigh drill, through 26 ft. of the same whinstone, in 1056 hours. The Burleigh drill, therefore,

effected a saving in time of nearly one-half, whilst as regards economy Mr. Dunn states that he "had a clear saving of about half the expense as compared with hand labour."

It appears, moreover, that we shall soon know the results obtained with the drill in connection with metalliferous mining in this country, for during the past month it has been put to work at the Great Fron Fownog lead mines, and Capt. William Wasley promises us a report upon its working for next week's Journal. In first, adopting a machine some inconveniences are naturally met with, but it seems that the greatest which Capt. Wasley has had to encounter was to draw the machine high enough in the shaft (without employing extra hands) to be beyond the action of the blast. This he has at once disposed of by ordering a pair of patent blocks and chains, which he will attach to a suitable cross timber in the shaft. This will permit of the machine being lifted bodily the few feet requisite previous to each blast, and will also much facilitate changing the place of the machine, so as to put it in the holes in the best position for producing the maximum effect with each charge of powder. To prevent the delay, now unavoidable, after each blast during the clearing off of the powder smoke, Capt. Wasley is also putting down 6-inch zinc air-pipes, which will give greater comfort to the men, and permit of more rapid progress in sinking. With regard to the Fron Fownog drill, it may be mentioned for the information of those who have an idea that it is more difficult to get good results with compressed air than with steam direct, that it has been found that the compressed air is both more convenient and more economic. Capt. Wasley appears to have full confidence in the utility of the machine, and if he succeeds, as he no doubt will, in getting down the shaft in half the time and at one-half the expense that would be required by hand labour, he will entitle himself not only to the honour of being the first to popularise machine drilling in this country, but to the thanks of the mining community generally, and of the Fron Fownog adventurers in particular.

THE IRON AND STEEL INSTITUTE.

In the Supplement to this week's Journal we have given very full details of the proceedings at the meetings of the Iron and Steel Institute in South Staffordshire and Shropshire, and on which we shall have some remarks to make next week, when we shall have an opportunity of giving additional particulars. The visit was brought to a conclusion on Thursday night, by a banquet given by the ironmasters of South Staffordshire in the Exchange Assembly Room, at Birmingham. Lord Dudley presided, having on his right Mr. Henry Bessemer, the president of the Institute, and on his left Lord Lyttelton. About 150 guests sat down to dinner. After the usual loyal and patriotic toasts, Lord WARD, in proposing "The Iron and Steel Institute," said he believed that in many respects there never was a meeting gathered in Birmingham that had more truly the interest of the iron trade at heart. The members of the trade in South Staffordshire and Worcestershire could not have done themselves more honour than to have the members of the Iron and Steel Institute as their guests; and he believed they could not have invited any other society commensurate with which would have greater results, considering that the object of the Institute was to promote the more scientific manufacture of iron in all places where that manufacture was known. It was of the greatest possible advantage that among the leading members of this great trade there should be a freemasonry which should be the bond of all, so that there should be a more intelligent dealing with those materials with which they had to do, and that the thoughtful foreigner should not get before them in any respect. He was far from saying that he thought the intelligence of the foreigner, or of any one nation, in the aggregate, was greater than our own; but he believed that things were so evenly balanced that if they took 1000 men anywhere who were interested by the same motive they would find, after due discussion, there was as much intelligence in their minds as could be found elsewhere. But he would not say that if several countries were to enter into the bond of which he had spoken, if there were a mutual understanding and a free interchange of ideas, they would not be immeasurably superior to any one country that was aloof. What recommended this society to him *prima facie* was that it asked everybody, in the broadest possible way, to become its member, and to bring his ideas and knowledge to a common centre for the benefit of all, that those ideas which were worth anything might be adopted, and the chaff cleared away. If the society should so develop itself that those men should join it who had hitherto remained each in his own district, working for his own fortune, and thus become members of one family, giving rise to a better mutual understanding and a better knowledge of the common wants of all, and should thereby become able to deal justly and fairly with that great question of capital and labour, the society would not have been formed in vain. (Cheers.) His own belief was that it must come to this. When he thought of the names of Bessemer—(cheers)—Hill, from America, Neilson, of Scotland, Bell, of the North of England, Williams, of the Midland Counties, and Fothergill, of South Wales, he could not but feel that something of more than common interest had been started amongst them, and that long after the memories of that day were gone the fruit of their gathering would endure. He would couple with the toast the name of Mr. Bessemer. (Cheers.)

Mr. BESSEMER responded. He said the meeting of the Institute in South Staffordshire had certainly been one of the most interesting yet held. The members had on all occasions met with the utmost kindness and confidence on the part of the members of the trade in this part, and everything in the various visits had been laid before them as frankly as they could desire. He would say that the Institute did not come here pretending to teach the ironmasters of South Staffordshire what they knew so well, and what had been practised there years before he was born. The members of the Institute came here to learn all they could, and in exchange to give whatever they might know, so that all their operations might be improved, and their difficulties be made one by one to disappear. When he remembered the cordial reception which the Institute had received, and that Lord Dudley had left the breezy moors of Scotland, where everyone this warm weather would like to wander, and had come to dusty, grimy, money-making Birmingham, in order to meet the Institute, he could not but return to his lordship and the South Staffordshire ironmasters, on behalf of the Institute, his warmest thanks.

Lord LYTTELTON gave "The Iron Trades of Great Britain," coupled with the names of Mr. Hewitt (North America), Mr. Neilson (Scotland), Mr. I. Lowthian Bell (North of England), Mr. Walter Williams (Midland Counties), and Mr. Fothergill, M.P. (South Wales).

Mr. HEWITT, in responding, said he could not hear the remarks of the Chairman without thinking of Dudley, the founder of the iron industry of this country, and also of America. (Hear, hear.) Since he had been in England, and during the time he had attended the meetings of the Institute, he had met many whom he had never known personally, but with whom he was well acquainted as rivals in every iron shop in America. (Hear, hear.) The unity existing between the manufacturers of this country and his own led him to hope that in time to come the members of the Institute would hold one of their meetings in America. (Cheers.) He could not promise them such an entertainment as they had had that evening, but he could at least guarantee them such a hearty and cordial welcome as a new country, rude in its habits, rude in its speech, rude in its customs, could give. The late-spring always hung outside, and he could promise them, if they held their meetings in America, every ironmaster in the country would come forward to welcome them as brothers welcomed brothers. He had known trade associations established for the purpose of making money, and for mutual protection; he had known capitalists combine to defend their capital, and workmen to defend their labour, but as far as he knew in the history of industry this was the first time that a great trade had met together for the purpose of investigating science for the good of the whole world. (Hear, hear.) It seemed to him to augur better for the future, and it would do much to define the duties which owners owed to their property, which employers owed to their labourers, and which labourers owed to their employers. In meeting the English ironmasters the American manufacturers felt that they were meeting not only their friends and their brothers, but their schoolmasters; Americans never had the door shut in their faces in England when they wished to investigate English manufactures. They derived the bulk of their instruction from England, and he was glad to say that they were about to make some little return in the shape of Mr. Danks's puddling-furnace. The furnace, he knew of his personal knowledge, was a complete success, and it was even hoped that having abolished the puddler, and made a gentleman of him, they might then in time make iron and steel direct from the ore. (Cheers.)

Mr. NEILSON, Mr. BELL, Mr. WILLIAMS, and Mr. FOTHERGILL, M.P., also responded, the latter deploring the ill-advised legislative interference on the part of the Government with the iron trade.

THE PATENT LAWS—THE VENTILATION OF ICE-SAFES.—A letter from a correspondent, under this heading, appeared in the Supplement to the Journal of Aug. 12, in which the inventions of Mr. Kent are alluded to in an objectionable manner, and reference is also made to a suit which he has instituted for an infringement of his trade rights. We have no hesitation in stating that we have no sympathy with the views of the author of the article, which was published, as such miscellaneous subjects usually are, on the good faith of the writer. Indeed, had the matter received that attention which it properly should, the article would not have been inserted. As it is, we have to apologise to Mr. Kent for this, and to express our regret, which we unhesitatingly do, that any communication open to the suspicion of assailing the character of a gentleman of Mr. Kent's position, or his merit as an inventor, or the course he has taken in defence of his trade rights, should have appeared in our columns. The value of Mr. Kent's patented inventions are not open to question—their universal sale having long established their utility and worth.

STEAM GENERATORS.—The invention of Mr. L. WIEGAND, Philadelphia, consists in producing an active circulation of the water in the suspended

tubes of a fire-box to facilitate the separation of the steam from the water by means of deflectors; and also in a furnace formed of separate sections specially adapted to the use of this boiler when applied to marine and inland navigation uses and in locomotives.

NEW BESSEMER PATENTS.—Last week we noticed the grant of no fewer than five patents connected with iron and steel to Mr. Henry Bessemer. These include a blast-furnace, a furnace, a converter, a process for casting metals, and another furnace. The most important of these is the process of subjecting molten iron to atmospheric air, under pressure sufficient to keep the iron in a perfectly fluid state until it is cast. This is accomplished by aerostatic pressure in the converter, by which the intense heat necessary is kept up, and a large supply of oxygen is furnished to the molten metal. A special converter of extra strength is used in this process, the mouth of which is made smaller than in those hitherto used, and lined with a ring of hard-burnt fire-clay, or with a composition of clay and plumbago. The pressure required is from 15 to 25 lbs. to the square inch, which must, however, be varied for different kinds of iron. The process of casting metals it is said, will be the most important addition which Mr. Bessemer has yet made to the manipulation of iron and steel, and will greatly add to his renown as an original inventor in this line. (Iron and Coal Trades Review.)

BOILERS.—Mr. J. HARRIS, Old Jewry, proposes to enamel the tubes of steam-boilers to prevent the formation of incrustation.

CORNISH PUMPING ENGINES.—The number of pumping-engines reported for June is 20. They have consumed 1758 tons of coal, and lifted 14.3 millions tons of water 10 fms. high. The average duty of the whole is, therefore, 55,000,000 lbs., lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

Cargill Mines—Michell's 72 in.	Millions	66.7
Chilverton Moor—70 in.		61.8
Crewey and Wheal Abraham—Sturt's 90 in.		77.6
Ditto ditto Pelly's 90 in.		69.5
Ditto ditto Williams's 70 in.		69.1
Doleath—85 in.		69.1
Great Work—Leed's 60 in.		58.2
West Wheal Seton—Harvey's 85 in.		68.0
Wheal Seton—Tregonning's 70 in.		69.9

Royal School of Mines.

ROYAL SCHOOL OF MINES.—DIRECTOR, Sir RODERICK IMPEY MURCHISON, Bart., K.C.B., F.R.S., &c.

During the TWENTY-FIRST SESSION, 1871-72, which will commence on the 2nd of October, the following COURSES OF LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

- 1.—CHEMISTRY By E. FRANKLAND, Ph.D., F.R.S.
- 2.—METALLURGY By JOHN PERCY, M.D., F.R.S.
- 3.—NATURAL HISTORY By T. H. HUXLEY, LL.D., F.R.S.
- 4.—MINERALOGY By WASHINGTON W. SMYTH, M.A., F.R.S.
- 5.—MINING By A. C. RAMSAY, LL.D., F.R.S.
- 6.—GEOLOGY By A. C. RAMSAY, LL.D., F.R.S.
- 7.—APPLIED MECHANICS By T. M. GOODEVE, M.A.
- 8.—PHYSICS By FRANCIS GUTHRIE, F.R.S.
- 9.—MECHANICAL DRAWING, by the Rev. J. HAYTHORNE EDGAR, M.A.

The Fee for Students desirous of becoming Associates is £30 in one sum, on entrance, or two annual payments of £20, exclusive of the Laboratory. Pupils are received in the Royal College of Chemistry (the Laboratory of the School) under the direction of Dr. Frankland, and in the Metallurgical Laboratory under the direction of Dr. Percy.

Tickets to separate Courses of Lectures are issued at £3 and £4 each. Officers in the Queen's Service, Her Majesty's Consuls, Acting Mining Agents, and Managers, may obtain Tickets at reduced prices. Science Teachers are also admitted to the Lectures at reduced fees. His Royal Highness the Prince of Wales grants Two Scholarships, and several others have also been established by Government.

For a prospectus and information, apply to the Registrar, Royal School of Mines, Jermyn-street, London, S.W. TRENHAM REEKS, Registrar.

THE EAST BOTTLE HILL MINING COMPANY (LIMITED).

Capital, £30,000, in 6000 shares of £5 each. Incorporated under the Companies Acts, 1862 and 1867, by which the liability of shareholders is limited to the amount of their shares. Deposit, £2 per share on application, and £2 on allotment, and the balance by calls as required.

DIRECTORS. JAMES JOHNSON, Esq., Belmont House, Starbeck, Harrogate. WILLIAM WARD, Esq., West Hill, Hessele, Hull. GEORGE DAWES, Esq., Milton, near Barnsley. JOHN PERROT, Esq., St. Ann's Hill, Cork. EDWARD NEWTON CARR, Esq., Plymouth Grove, Manchester.

BANKERS—THE ALLIANCE BANK (LIMITED), London, E.C. SECRETARY—MR. EDWARD BREWIS.

OFFICES—19, BISHOPSGATE STREET WITHIN, CITY, LONDON, E.C.

PROSPECTUS. This Company has been formed to purchase and work the mineral property known as the East Bottle Hill Mine, situated in the parish of Plympton St. Mary, Devon. No cash payment is to be made by this company for the purchase, nor is any promotion money to be paid.

The lodes are seven in number traversing the property, and some already worked on, the size of which appears by the accompanying report. The Great Champion lode of the district is stated to have returned ores to the value of about two millions sterling (£2,000,000), and it will be seen from the reports that it traverses the set for about 400 fms.

The assays by Messrs. Johnson, Matthey, and Co. (Assayers to the Bank of England) give the following results:—

CERTIFICATE OF ASSAY. London, July 10, 1871.—We have examined the samples of minerals marked as under, and find the following to be the results:—

- Mark sample, East Bottle Hill Mine.
- Sample No. 1, from Bottle Hill copper lode, produces of copper, 29.5 per cent.
- Sample No. 2, from shallow adit level east, on north lode, produces of tin, 19.9 per cent.
- Sample No. 3, from south lode, west of road leading to Hemerdon Village, produces of tin, 8.3 per cent.
- Sample No. 4, from south lode, east of the mine, in granite, produces of tin, 4.0 per cent.

East Bottle Hill Mine, July 1, 1871.—Sirs: I beg to send you a report of this mine.—No. 1, or North Lode: We have commenced to sink on this lode the main lode of Bottle Hill Mine, which runs through your property.—East Bottle Hill—for full 400 fathoms in length, and has been productive up to their east boundary, and no doubt it will turn out equally good in this, and in my opinion more so as we approach the elvan and granite a very short distance east of the shaft we have just commenced to sink. I may just say that I have been agent in old Bottle Hill for the last 30 years, and our monthly returns for years were from 15 to 20 tons of tin, and in copper ore from 180 to 200 tons monthly, raised on this lode. Price of tin varied at that time from £45 to £50 per ton. The copper ore was very good; average price about £15 per ton. I have known prices sold as high as £20 per ton; the standard for copper was then £20 to £24. This lode in old Bottle Hill Mine has been worked for more than half a mile in length; for this distance the lode's average size is full 10 feet wide, with an underlie north 3 ft. in a fathom, and has been worked on to the depth of 170 fms. from surface. This lode alone has returned something like £2,000,000 sterling in ores, and which has given rise of very large amount for generations to the ancient family of Strode. Having known this locality for so many years, and seen this lode worked up to your west boundary, and finding the lode productive in your set, and nearly all in virgin ground, and for about 600 fms. in length on their course, and the cross-cut now driving will unwater the whole of them for full 60 fms. in depth. I know no mine in the two counties possessing anything like the advantages of East Bottle Hill, and in my opinion, if this mine be carried out with spirit and good management, it will soon be made a good paying dividend mine, none better in the two counties. JOSEPH EDDY.

A battery of 48 heads of stamps would crush 50 tons of tin ore a day, and with 1½ per cent. produce would yield 15 tons of tin per month, value at present prices of tin £1200, but after opening up the lodes I believe you will by the return of tin and copper double this amount, therefore allow me to say an engine should be put up that would work 72 heads of stamps with ease.

In conclusion, allow me to say you have seven known lodes already discovered in your set, and nearly all in virgin ground, and for about 600 fms. in length on their course, and the cross-cut now driving will unwater the whole of them for full 60 fms. in depth. I know no mine in the two counties possessing anything like the advantages of East Bottle Hill, and in my opinion, if this mine be carried out with spirit and good management, it will soon be made a good paying dividend mine, none better in the two counties. JOSEPH EDDY.

FORM OF APPLICATION FOR SHARES. (To be retained by the Bankers.)

To the Directors of the East Bottle Hill Mining Company (Limited). GENTLEMEN,—Having paid to your bankers the sum of £ , being a deposit of £2 per share, on my application for shares in the above company, I hereby request that you will allot me that or any less number of the shares up to this point, I have no hesitation in saying that if you open up this lode the number of shares allotted to me, and I hereby authorise my name to be entered on the Register of Members of the company for the shares so allotted.

Usual signature * * If no allotment be made the deposit will be returned without any reduction.

MR. W. WHITE, ASSAYER AND CONSULTING CHEMIST. In announcing the REMOVAL of his LABORATORY and ASSAY OFFICE from Crown-court to much more commodious premises, 25, FINSBURY PLACE, near FINSBURY CIRCUS, hopes to RETAIN the CONFIDENCE

Assaying taught. Lectures to Schools and Public Institutions.

MR. R. TREDINNICK, CONSULTING MINING ENGINEER. 3, CROWN COURT, THREADNEEDLE STREET, LONDON. Selected List of Dividend and Progressive Mines, &c.; selected List of Foreign Bonds and Colonial Bonds, &c.; selected List of Home Securities, Banks, Railways, and Miscellaneous, &c.

"SCIENCE OF INVESTMENT" revised. Second Edition. Foreign, Colonial Bonds, Railway Stocks and Shares, Banks, Insurance, &c. Miscellaneous Stocks and Shares bought and sold at the market prices subject to a profit of 1 per cent. on the price of the day.—Aug. 25, 1871.

Ten Thousand. Price 5s.

Established

THE GREAT EAST FOXDALE SILVER-LEAD MINING COMPANY

(LIMITED), ISLE OF MAN.

Capital £20,000, in 20,000 shares of £1 each.

Deposit, 5s. per share on application, and 5s. per share on allotment; the remainder in instalments of 2s. 6d. each, at intervals of not less than two months.

ABRIDGED PROSPECTUS.

The existence of, together with the large quantity of high-priced silver-lead now raised in the Isle of Man, particularly in the Foxdale Mining District, cannot fail to direct the attention of all who are interested in lead mining to these localities, in which there exist such fair and reasonable chances of large returns for a spirited and judicious outlay of capital.

With a view to the advantages alluded to, the present company has been formed for the purpose of working the rich and valuable mine situated in the Isle of Man, and known as the Tynwald Mine, in the Bishop's Barony, parish of Marown, east of and adjoining the Foxdale Mine, together with the adjoining property, a grant of which has been obtained from the Crown.

The extent of the united sets will be about two miles on the course of the splendid east and west lode from which the celebrated Foxdale Mine has returned enormous quantities of rich silver-lead, from the sale of which the shareholders have received upwards of £200,000 in dividends, and the mine still continues as productive as ever.

On the Tynwald portion of the mine there has been already a large amount of money spent in driving an adit level about 80 fathoms in length, and in sinking the engine-shaft about 50 fathoms, from which sinking there has been obtained about 200 tons of lead ore, leaving a nice course of ore in the bottom of the shaft when last seen.

There are also erected on the works a good engine-house, offices, &c., which will save the company a great outlay and loss of time, and when the necessary machinery is erected the mine will at once be ready for active operations (upon the already discovered lode), which will be carried on in a vigorous manner, under judicious and economical management, when there is no doubt that large and profitable returns will be realised.

Independently of the advantages alluded to there has been discovered east of the Tynwald shaft, and immediately adjoining the new grant of ground, a splendid course of ore a few feet from surface, and opened on for about 30 yards by three cuttings from surface, the deepest not more than 8 feet, in which a splendid lode, with a fine course of solid ore 8 to 10 inches wide, may be seen, and from which solid pieces of lead, each over 5 lbs. in weight, were taken.

This admits of no question, as it is now open to inspection.

The directors, in calling attention to the annexed extracts from reports, beg to say that they have little to add to the statement of facts put forward by men of well-known ability and thorough practical knowledge of mining, both in Wales and in the Isle of Man, beyond stating that they can with the greatest confidence recommend this undertaking, believing that it is free from many risks that generally attend mining speculations; for there are not only lodes of great promise in the sets, but they have actually been cut rich in lead at surface, as stated in the reports; and as the mines are in a district so well known for its mineral wealth, the directors can with every confidence recommend the Great East Foxdale Mine as a good and safe investment.

The Memorandum and Articles of Association may be inspected at the offices of the company, where splendid specimens of ore recently taken from the mine may be seen, and prospectuses and forms of application for shares obtained.

Any further information can be had upon application personally or by letter to J. HUGHES, at the office of the company, 59, Peel-street, Liverpool, where also an order to inspect the mine can be obtained.

EXTRACTS FROM REPORTS.

From Capt. JOHN LLOYD, of the Hendre Mines, &c., Flintshire.
To the east of the engine-shaft, some 30 fathoms or thereabouts, three small shallow cuttings, some 30 yards apart, and sunk to the depth of 6 or 7 feet upon the crop of the south lode, and in each of these cuttings a handsome course of ore is now to be seen, from which I cut about a hundredweight of solid silver-lead, as per sample sent to your office. If this course of ore should continue downwards, and there is every indication to warrant it doing so, and should also improve in value, it being a strong mastery lode, with every component matrix, such as oxide of iron, sulphure of zinc, carbonate of lime and lead, which are always the natural gauge of the chief bearing veins of the Silurian rocks of all districts, I see nothing to prevent your having a profitable mine in a very short time in this part alone of your valuable property.

From Capt. MATTHEW GROSE, Manager of the Ballacorkish Silver-lead and Copper Mining Company (Limited).
The state and promise of these mines have been very materially altered for the better by the recent discovery of a lode of very great promise, which is now to be seen at the surface, and has been opened out for a distance of 40 yards in length, and I must say that I have not seen anything that pleased me so much as several years past. From the knowledge I have of the district, and from information I have gathered together, I am of opinion that there is another lode close by the one that has just been opened out, and which can be easily proved by cross-cutting from below. I have only to reiterate my former opinion, that my firm conviction is that you have a most valuable property.

From Capt. JOHN KITTO, late Manager of the Great Laxey Mine.
This property is very favourably situated, being in close proximity to the main road leading from Douglas to Peel, and its position offers facilities for the transit of materials, ores, &c., such as are seldom met with in the island. Its geological position is also of the most favourable character, being a continuation of the Foxdale run of mineral ground, and not far from the granite range, which is considered a very desirable object; and the lode on which the principal operations have hitherto been conducted is believed to be identical with one of the main producing lodes in the Foxdale Mine, known as "Beckwith's vein," which in that mine has yielded enormous quantities of lead ore, and has returned immense profits to the shareholders.

From Capt. BAWDEN, late Manager of the Isle of Man or Foxdale Mining Company.
Taken in a mining point of view, with the knowledge that the Foxdale vein passes through it, I would venture to state that there is not a more favourable district for mining speculation in the Isle of Man. I find by the surface trials recently made that some splendid specimens of lead ore have been met with on the base of the south of Foxdale vein (about 35 fathoms east of the engine-shaft), which, if it continues in depth, must very materially enhance the value of the property.

THE DARLINGTON WAGON COMPANY,

MANUFACTURERS OF RAILWAY WAGONS

OF EVERY DESCRIPTION,

For Cash, or on Deferred Payments, or Hire.

REPAIRS EXECUTED WITH DISPATCH, ON REASONABLE TERMS.

OFFICES AND WORKS,

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GENERAL MINING OFFICES,

BEDFORD FOUNDRY, TAVISTOCK,

CONDUCTED BY

MR. CHARLES F. COLLOM,

MINING ENGINEER, AGENT, AND SURVEYOR.

Who undertakes the entire Local Management of Mines, including Dripping, making accurate Underground Communications and Plans, at a stipulated salary.

Mines inspected and faithfully reported on, orders for which purpose should be made for Mr. ColloM, or his Agent.

Promoters of New Mining Enterprises (which will bear the strictest scrutiny) rendered every assistance.

Investments in Mines arranged for Capitalists,—the condition of the companies, as well as the prospects of the Mines, being first strictly investigated.

MR. CHARLES F. COLLOM OFFERS FOR SALE ONE THOUSAND SHARES OF EDINBURGH SHARES, at only 2s. 6d. each. The immediate purchase of these shares he recommends as a bona fide speculation. The mine is nearly a mile in length on the course of the lodes, which are a continuation of the productive lodes of Okeford, the directors of which mine from prospectus anticipate shares will be in demand at from £2 to £3 each.

Also, an OFFER WANTED FOR ONE HUNDRED OKEL TOR.

Address as above.

CAPTAIN ABSALOM FRANCIS,

GOUGHAN, ABERYSTWITTH, MINING AGENT, ENGINEER, AND SURVEYOR.

The great success which is attending the opening and working of the Mines of the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABSALOM FRANCIS, induces him to offer his services, to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies and private shareholders.

For terms, apply to Capt. ABSALOM FRANCIS, as above.

MESSRS. LISCOMBE AND CO., 59, SOUTH CASTLE STREET, LIVERPOOL.

To inform their CLIENTS and the PUBLIC that they are PREPARED to transact BUSINESS in ALL CLASSES OF MINING SHARES—English, Foreign, and of all the closest market prices.

A Mining Engineer of great experience having recently joined the firm, they are in a position to make thorough inspections and surveys, and give first-class reports upon all metalliferous mines throughout the world. They are also ready to provide capital to any moderate extent for working bona fide mineral properties, no matter where situated.

MESSRS. LISCOMBE AND CO. have for sale at this present time shares in several highly promising progressive mines, which are certain shortly to pay large dividends upon a very small outlay.

Full particulars will be forwarded on application to bona fide investors.

GUIDE TO INVESTMENTS.

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SPARGO'S "GUIDE TO INVESTMENTS" affords information (ample and correct) of all the best-paying investments, and the names of business should consult the "Guide" for valuable and reliable intelligence.

THOMAS SPARGO, Gresham House, Old Broad-street, E.C.

Established Twenty-five Years, Fifteen at the above address.

HIGHLY IMPORTANT and ATTRACTIVE SALE of the WHOLE of the WORKS, SUPERIOR and VALUABLE PLANT and MACHINERY at the OIL WORKS close to PADESDOWN STATION, on the Chester, Mold, and Denbigh Railway.

MESSRS. CHURTON AND ELPHICK beg to announce that they have been favoured with instructions from Mr. Joseph Turner, of Queen's Ferry, who is giving up the Oil Business at Padesdown, to SELL, BY AUCTION, on Monday, Sept. 11, 1871, commencing at Eleven o'clock A.M. to the minute, the WHOLE of the COSTLY and MODERN

PLANT AND MACHINERY.

Including retorts, condensers, revolvers, with all necessary appliances; horizontal STEAM ENGINE, 15-in. cylinder, 5-ft. stroke, with Cornish BOILER and fittings, separators, pipes, and receiving tanks; large brick tank, with cover and piping; 4 7-ton strong east-iron stills, with iron worms and condensers, and fittings; 4 covered east-iron tanks, with lids and separators; large east-iron stove; oil tank, with piping; 4 bleaching or settling tanks, and piping; 2 east-iron agitators, with shafting and fitting complete; pumps; strong horizontal ENGINE, 8-in. cylinder, 2-ft. stroke, for working agitators, &c.; large vertical STEAM BOILER; 2 east-iron grease-mixers, with shafting, &c.; 6 grease-pans, and fittings; large building, with galvanised iron roof and chimney; 2 20-cwt. platform weighing-machines; wrought water-tank, and piping; the contents of the blacksmith's shop, engine-house, and store-room.

The BUILDINGS, comprising the engine-house and refinery, 74 ft. by 21 ft., with corrugated iron roofing, iron doors, &c.; new wrought-iron fittings for a roof; powerful purchase for hauling wagon up incline; railway siding and rails (part double headed); quantity of wrought and cast scrap; shear legs; office furniture; fire-proof safe, &c.

Catalogues may be obtained ten days prior to the sale at the offices of the Auctioneers, Chester, and Whitechurch (Salop).

CRADLEY, NEAR STOURBRIDGE.

FREEHOLD MINERAL ESTATE AND BUILDING LAND.

MESSRS. OATES, PERRENS, AND WOOLDRIDGE are instructed TO SELL, BY AUCTION, on Friday, the 8th day of September, 1871, at the Talbot Hotel, Stourbridge, at Five o'clock in the afternoon, in One Lot, or in such lots as shall be decided upon at the time of sale, and subject to conditions which will be then read, a very valuable

FREEHOLD MINERAL ESTATE.

Situate at OLDNALL, in the Parish of CRADLEY, in the County of WORCESTER, consisting of over THIRTY-FIVE ACRES of EXCELLENT ARABLE LAND, with suitable Homestead.

The estate is believed to contain the thick and other measure of coal and ironstone of the South Staffordshire coal field, and also the Stourbridge fire-clay seam.

It is situate in a populous locality where there is a very large demand for coal, for manufacturing and household purposes, which demand is at the present time increasing to a great extent, in consequence of the exhaustion of the coal fields of the adjoining districts.

It is believed that the coal in an adjoining colliery has been worked up to the boundary of the property.

The Stourbridge and Birmingham Railway runs within half a mile of the estate, and the Stourbridge and Birmingham Tramway road is a less distance. Plans and particulars and any further information may be obtained of Messrs. OATES, PERRENS, and WOOLDRIDGE, land and mine agents, Stourbridge; or of Mr. RICHARD GROWCOTT, mining agent, King-windford; or of Mr. R. L. H. MOLE, solicitor, Sheerness, or of Messrs. BROOK and CHAPMAN, solicitors, 2 and 3, Abchurch-yard, London, E.C.

TITANIC STEEL AND IRON COMPANY

(LIMITED).

STEEL AND IRONWORKS FOR SALE, BY PRIVATE TREATY.

THE LIQUIDATOR of the ABOVE-NAMED COMPANY is prepared TO TREAT for the SALE, by private arrangement, as a going concern, of the WHOLE of the company's VALUABLE FREEHOLD MANUFACTURING PREMISES, known as

THE FOREST STEEL WORKS.

Situate at COLEFORD, in the FOREST OF DEAN, GLOUCESTERSHIRE, extending over an area of about SEVEN ACRES, together with all the WORK SHOPS, ROLLING MILL, FORGE, STOREHOUSES, OFFICES, PLANT and MACHINERY; also some valuable PATENTS, LICENSES, and LEASES, including LEASE of DAREHILL and SHUTCASTLE COLLIERIES.

The Liquidator is also prepared to treat separately for the sale of the ROLLING MILL, with ENGINES, BOILERS, LATHES, SHEARS, &c., therein, which are all nearly new, and in first-class working order. There are THREE TRAINS OF ROLLS—viz., 10 in., 12 in., and 16 in. wire train—all driven by a 32 in. cylinder horizontal high-pressure non-condensing engine (75-horse power nominal) by Davy Brothers, of Sheffield. Fly-wheel 20 ft. in diameter, weighing 20 tons.

Full particulars and orders to inspect the works can be obtained on application to ROBERT FLETCHER, 2, Moorgate-street, London, E.C., the Liquidator; or to R. WOODWARD, Forest Steel Works, Coleford.

The usual business of the company is meanwhile carried on at the works.

MAES-Y-SAFN MINE COMPANY (LIMITED).

IN LIQUIDATION.

TO BE SOLD, BY PUBLIC AUCTION, by Messrs. CHURTON and ELPHICK, on Tuesday, the 5th day of September, at the Queen Hotel, Chester, at One o'clock P.M. precisely (if not disposed of in the meantime by Private Treaty), the

MAES-Y-SAFN MINE, MACHINERY, AND PLANT.

Consisting of an 85-hp cylinder ENGINE, TWO WINDING ENGINES, BOILERS, and connections, crushing machine, water wheels, pitwork, &c.

The whole to be sold in One Lot as now standing, together with the residue of the existing lease from the Marquis of Westminster.

The mine is drained to the 180 yard level, and is open for immediate inspection. A new lease will be granted by the Marquis of Westminster on favourable terms to an eligible purchaser prepared to continue the working of the mine.

For particulars and conditions of sale, apply to Mr. PAUL NINNES, the Liquidator, No. 6, Queen-street-place, London; or to Messrs. CHURTON and ELPHICK, Auctioneers, Chester.

ARMAGH LEAD MINING COMPANY (LIMITED).

IN LIQUIDATION.

TO BE SOLD, BY PUBLIC AUCTION, by Mr. F. F. CAMPBELL (Auctioneer, Dundalk), on Thursday, the 21st September, 1871, at Twelve o'clock at noon, on the CREGGAN MINES, near CROSSMAGLEN, DUNDALK, IRELAND, all the MACHINERY and PLANT, consisting of—

ONE 26 inch cylinder CORNISH PUMPING ENGINE, 8½ feet stroke, with TWO BOILERS, about 8 tons each.

ONE 16 inch HORIZONTAL ROTARY CONDENSING ENGINE, 5 feet stroke, with TWO BOILERS, about 5 tons each.

ONE 14 inch cylinder ROTARY CONDENSING ENGINE, with ONE BOILER, about 6 tons, stroke 5 feet, with winding and pumping gear attached.

ONE CORNISH CRUSHING MILL, rollers 22 inches diameter, with east-iron raft wheel and fittings, complete—all in excellent condition.

ABOUT 45 fathoms 9 inch MAIN RODS, with strapping plates, bolts, &c., and about 80 fathoms 9 and 10 inch PUMPS, all with working barrels, H-pieces, and door-pieces to match,—all nearly new.

About 120 fathoms 6 and 7 inch PUMPS, with working barrels and door-pieces complete; also ONE 8½ inch PLUNGER POLE, with pole case, stuffing box and gland.

150 fathoms 10 inch CAPSTAN ROPE, TIMBER, CHAINS, WIRE ROPE, and all the necessary MATERIALS to a going mine.

Capt. BAILEY, Crossmaglen, will show the materials on the ground, and any further particulars required will be given by

T. CURRIE GREGORY, C.E., Liquidator.

62, St. Vincent-street, Glasgow, August 28, 1871.

TO SELL, OR LET ON HIRE, for cash or deferred payments, FIFTY COAL WAGONS, hopper built, with bottom and slide doors, carrying seven tons.

Apply to MANSTON COAL COMPANY, Leeds.

LEAD MINES IN THE COUNTIES OF DURHAM AND NORTHUMBRIA.

TO BE LET, ON LEASE, the HUNSTANWORTH and NEWBIGIN ROYALTIES, the former about 3534 acres, and the latter 200 acres, or thereabouts.

The Hunstanworth Royalty adjoins the celebrated W. B. Lead Mines, and has for many years yielded large quantities of lead ore, and much of the ground is unworked.

Incoming lessees can have the plant and machinery, now upon the premises, at an annual rent, with a right to purchase at any time during the lease, on terms to be agreed upon.

For particulars, apply to JOSEPH DODDS, Esq., M.P., No. 4, Spring-gardens, Charing-cross, London, S.W., and Stockton-on-Tees; Mr. NATHANIEL CLARK, Beamish Park, Fence Houses; or Mr. THOMAS J. BEWICK, C.E., No. 2, Westminster-chambers, Victoria-street, London, S.W., and Haydon Bridge, Northumberland.

CHILTON MINES.

TO BE LET, the COAL MINES within and under the CHILTON ESTATE, the property of the Right Hon. the Earl of Eldon. The Estate is situated near FEELYHILL, in the County of DURHAM, and contains 1240 surface acres, or thereabouts. The North-Eastern main line, and West Hartlepool main line, and branch lines of railway intersect the estate.

For particulars, apply to JOHN JOHNSON, C.E., Chilton Hall, Ferry Hill.

Chilton Hall, Ferry Hill, July 4, 1871.

SOUTH WALES SMOKELESS STEAM COAL.

TO BE LET, ON LEASE, a COLLIERY, now working on the above, with a WORKABLE AREA of over FIVE HUNDRED and NINETY ACRES. Railway through the property; eight miles from Port; coal on Government List.

For particulars, apply to Mr. LEYSON RHYS, Mining Engineer, Aberdare, South Wales.

TO BE LET, ON LEASE, for a term of years, SEVERAL ACRES of LAND, suitable for MANUFACTURING PURPOSES, advantageously situated on the south bank of the River Tyne, about two miles below Newcastle-on-Tyne, and within a quarter of a mile from the North-Eastern Railway. There is a good quay frontage, with deep water.

Apply to Mr. T. S. BRANWELL, King-street, Quay-side, Newcastle-on-Tyne.

CORNWALL.

VALUABLE SLATE AND SLAB QUARRY.

FOR SALE, a VALUABLE SLATE QUARRY, in CORNWALL, in the vicinity of the celebrated Delabole Quarry, well placed, with easy access to a Shipping Port.

The quarry, which has been opened, and a considerable sum expended upon it in bringing it into its present state of development, and the workings have exposed thick beds of the best Cornish slate and slab.

The quarry is held on lease for an unexpired term of about 27 years, at the exceeding low rent of £70 per annum.

For further particulars, apply to Messrs. TOMPSON, PICKERING, STYAN, and NEILSON, 4, Stone buildings, Lincoln's Inn, London, Solicitors.

ON SALE, a 50 in. cylinder PUMPING ENGINE, in good working order; also, all the PITWORK, comprising three lifts, a 12 in. and a 14 in. column.

Apply to the BROUGHTON COAL COMPANY, near Wrexham.

FOR SALE, BY PRIVATE CONTRACT:—ONE 30-inch cylinder ROTARY ENGINE, suitable for stamping and pumping.

ONE 36 inch cylinder PUMPING ENGINE.

ONE 10 ton and ONE 8 ton BOILER. All in good condition.

Apply to Messrs. JOHN HOCKING and SON, Engineers, Trewirgile-terrace, Redruth.

SURPLUS MACHINERY ON SALE.

FOUR WHEEL TANK LOCOMOTIVE, worked 15 months; price £330; splendid STEEL BOILER, by Adamson, 16 ft. by 4 ft. 6 in., price £60; several HORIZONTAL ENGINES, nearly new, and a large quantity of similar and other machinery. ENGINEERS' TOOLS, &c., &c., good as new, and cheap.

C. REEVES, BANK STREET EXCHANGE, MANCHESTER.

FOR SALE, TWO NEW SELF-PROPELLING 14-horse power PATENT PORTABLE WINDING or HAULING ENGINES, with winding drums, reversing gear, and all motions self-combined. TO BE SOLD CHEAP, under exceptional circumstances. Suitable for mining purposes.

Also, nearly new, SELF-MOVING 8-horse PORTABLE ENGINE, by Garrett, and ONE 8-horse SECONDHAND PORTABLE ENGINE, by ditto.

Apply to WHEATLEY KIRK and PRICE, 33, Princess-street, Manchester.

FOR SALE, a high-class 25-horse power PORTABLE STEAM ENGINE; also, a 16-horse power, with or without reversing gear.

FOR SALE, cheap, several first-class second-hand PORTABLE STEAM ENGINES, 3 to 14 horse power, in excellent order.

A NUMBER OF BOILERS, at a short notice suitable for portable engines.

FOR SALE, a first-class MORTAR MILL.

Apply to BARROWS and STEWART, ENGINEERS, BANBURY.

FOR SALE, BY PRIVATE CONTRACT, at PAR CONSOLS, Par Station, CORNWALL, and close to Par Shipping Harbour, ONE 80, and ONE 72 in. cylinder PUMPING ENGINE, and BOILER.

24, 18, and 15 in. WINDING ENGINES and BOILERS. 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 in. PUMPS.

A NUMBER OF BOILERS, at a short notice suitable for portable engines. Also, several CORNISH CRUSHERS, of various sizes, and a large quantity of other useful MINING MATERIALS.

Apply to Capt. PUCKEY, St. Blazey, Cornwall.

FOR SALE, THE UNDERMENTIONED ENGINES:—ONE 50 in. cylinder PUMPING ENGINE, with ONE BOILER.

ONE 24 in. cylinder ROTARY STEAM ENGINE, with or without BOILER, wrought iron fly-wheel shaft, and 10 ton fly-wheel.

ONE 12 in. cylinder ROTARY STEAM ENGINE, with ONE 6 ton BOILER. A 30 in. double-acting ROTARY STEAM ENGINE, and 12 ton BOILER.

THREE CORNISH BOILERS, from 10 to 12 tons each, in excellent condition. Also, several CORNISH CRUSHERS, of various sizes.

A 60 feet WATER WHEEL, with hammered iron round shaft, cast-iron sockets, rings, &c.

For further information, apply to—

W. MATTHEWS, ENGINEER, TAVISTOCK.

Tavistock, Feb. 3, 1871.

SECONDHAND MINING MACHINERY FOR SALE IN FIRST-RATE CONDITION.

PUMPING ENGINES, of various sizes,—viz., 80 in., 70 in., 60 in., 50 in., 40 in., 30 in.

WINDING ENGINES, STAMPING ENGINES, STEAM CAPSTANS, and CRUSHERS of various sizes.

A NUMBER OF BOILERS, at a short notice suitable for portable engines.

PITWORK of all descriptions, and all kinds of MATERIALS required for MINING PURPOSES.

TO BE SOLD, AT MODERATE PRICES.

The 80 in. is nearly new, and with several of the other engines, can be guaranteed of superior make and modern design.

For further particulars, apply to—

MESSRS. HARVEY AND CO.,

ENGINEERS AND GENERAL MERCHANTS, HAYLE, CORNWALL,

AND HAYLE FOUNDRY WHARF, NINE ELMS, LONDON.

CITY OFFICES (GRESHAM HOUSE), 23½, OLD BROAD STREET, MANUFACTURERS OF

PUMPING and other LAND ENGINES and MARINE STEAM ENGINES of the largest kind in use, SUGAR MACHINERY, MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

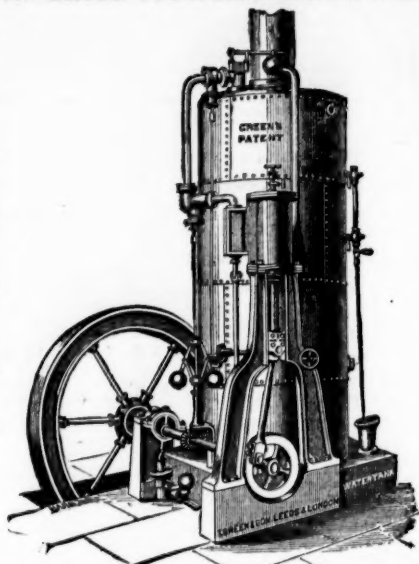
SHIPBUILDERS IN WOOD AND IRON.

THE PATENT PNEUMATIC STAMPS

May be SEEN AT WORK at HAYLE FOUNDRY WHARF, NINE ELMS by previous application at either of the above addresses.

GREEN'S PATENT BOILERS, WITH INVERTED CYLINDER ENGINE COMBINED

Specially adapted for Contractors, Joiners, and Builders,
Cabinet-makers, Brick-makers, Farmers, Mills, Dye-
houses, Workshops, Printing-offices, &c.



For Exportation they are invaluable, being sent out in
complete working order, ready for
immediate use.

The above Engines and Boilers are constructed in an exceedingly substantial
and simple manner, every part being easy of access, consequently can be readily
understood and managed; they are fitted with governors, equilibrium throttle
valve, stop valve, safety valve, feed pump, water and steam gauges complete.
The foundation plate answers the purpose of feed water tank, in which the
water is heated before passing into the boiler, and also of an ash-pit, and no
brickwork or foundation is required.
N.B.—Upwards of 600 of these Engines and Boilers are now at work, giving
entire satisfaction.

Illustrated PRICE LISTS free on application to
THOMAS GREEN AND SON,
SMITHFIELD IRONWORKS, LEEDS;
And 54 and 55, Blackfriars-road, London, S.E.

IMPROVED APPLICATION OF WATER POWER. THE TURBINE.

Mac Adam, Brothers, & Co.
ENGINEERS,

SOHO FOUNDRY, BELFAST,
After twenty years of experience, have brought their
Improved TURBINE to great perfection.

It is applicable to all practicable heights of fall, giving much
greater power from the water than any other kind of water-
wheel.

On low falls it has the great advantage of not being impeded
by floods or back-water.

It is particularly well adapted for situations where the
quantity of water is variable, and where all other wheels fail.

Its motion is extremely regular, and, when desired, a
Governor can be applied effectively.

This Wheel is at work in a great many places, to which
reference will be given.

BY ROYAL LETTERS
PATENT.

MALAM AND COMPANY,
ENGINEERS,

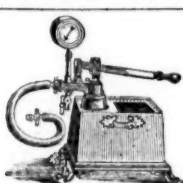
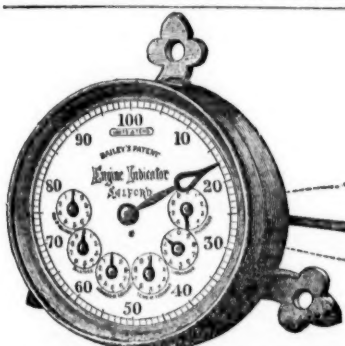
INVENTORS AND PATENTEES OF PORTABLE AND STA-
TIONARY GAS APPARATUS,

NEW ROAD, ROTHERHITHE,
LONDON.

CONTRACTORS for GAS, WATER, SUGAR WORKS, and DISTILLERIES
on the most improved principles.

Plans and specifications furnished on application.

Also, INVENTORS OF APPARATUS for GENERATING GAS from DEAD
and other OILS, applicable to every description of FURNACES, FLUES, &c.



**BAILEY'S TEST PUMPS
& SPEED INDICATORS.**
Bailey's Test Pump for Boilers
Pipes, &c.,
with Gauge to 250 lbs.
£10 10s.

**BAILEY'S PATENT
SPEED INDICATOR**
7 in. dial to 100 millions, £4 4s.

(In order, say if for reciprocating or rotary motion.) Used for Pumping
Engines, Winding Purposes, &c.

J. BAILEY & CO., STEAM GAUGE MAKERS AND BRASS FOUNDERS
ALBION WORKS, SALFORD, LANCASHIRE.



By a special method of preparation, this leather is made solid, perfectly close
in texture, and impermeable to water; it has, therefore, all the qualifications
essential for pump buckets, and is the most durable material of which they can
be made. It may be had of all dealers in leather, and of

I. AND T. HEPBURN AND SONS,
TANNERS AND CURRIERS, LEATHER MILLBAND AND HOSE PIPE
MANUFACTURERS,

LONG LANE, SOUTHWARK, LONDON.

Prize Medal 1851 1855, 1862, for
MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.

HIBBERT'S NEW THEORY AND PRACTICE OF MEDICINE,
in Two Vols., Vol. I. being a treatise on the Nature, Cause, Cure, and
Prevention of Disease in Human Beings; Vol. II. on Animals. In paper cover,
1s.; bound in cloth, gold lettered, 2s. each.
Published and sold by JOHN HEYWOOD, Manchester; and SIMPSON, MAR-
SHALL, and Co., London.

HIBBERT'S PATENT ANTISEPTIC, for stamping out Small
Pox, Cholera, Fever, and all Fermentive Inflammatory Diseases. May
be obtained through any Chemist, in bottles, price 1s. 1/2d., and upwards.
W. HIBBERT, Cheetham, Manchester.

PORTABLE STEAM ENGINES, WITH ALL RECENT IMPROVEMENTS. HORIZONTAL FIXED STEAM ENGINES, PORTABLE THRASHING MACHINERY, CORN MILLS, SAW BENCHES, PUMPS FOR IRRIGATION, &c.

CLAYTON AND SHUTTLEWORTH,
LINCOLN; AND 78, LOMBARD STREET, LONDON.

CATALOGUES SENT FREE BY POST ON APPLICATION.

TITANIC STEEL AND IRON COMPANY LIMITED SOLE MANUFACTURERS OF

MUSHET'S TITANIC BORER STEEL,

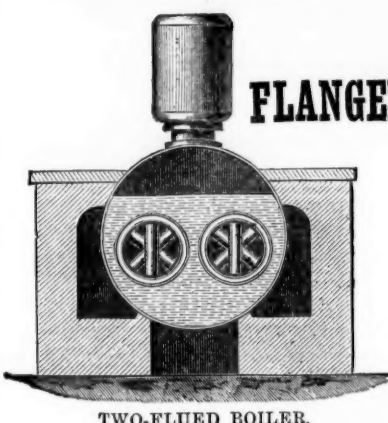
AND
Mushet's Titanic Cast Steel for Engineer's Tools, &c.

FOREST STEEL WORKS, COLEFORD,
GLOUCESTERSHIRE.

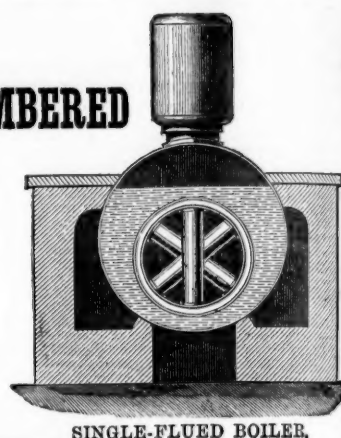
HAWKSLEY, WILD, AND CO.'S PATENT

FLANGED & COMBUSTION-CHAMBERED

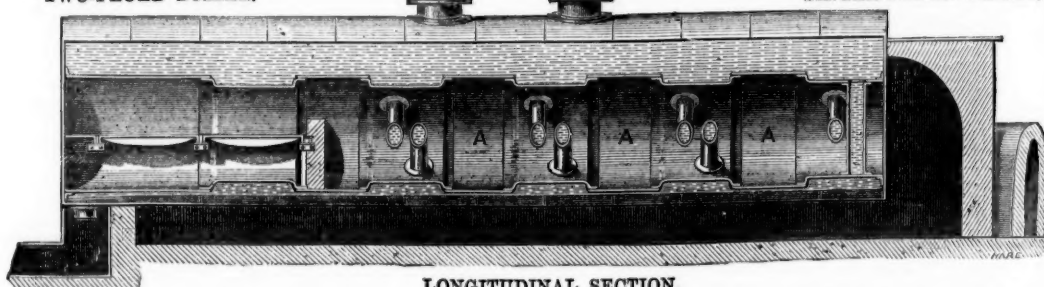
FLUED BOILERS.



TWO-FLUED BOILER.



SINGLE-FLUED BOILER.



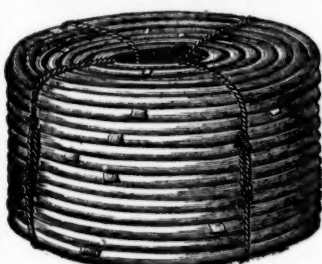
LONGITUDINAL SECTION.

THE FLUES OF THE ABOVE BOILERS ARE MADE OF TWO DIAMETERS, ONE RING OF PLATES BEING
4 inches less than the other, alternately.
The smaller rings being flanged, as shown in drawing, are thereby considerably strengthened, besides securing the most material point—a perfect
EXPANSION-JOINT.
The cross tubes are placed in the smaller rings of the flue, so that any one can easily be taken out and replaced.
The larger rings of the flue act as reverberating, combustion, and heat-retaining chambers, greatly economising the fuel.
These Boilers are strong, durable, and economical, and have been at work a number of years with the most satisfactory results.

PATENTEES AND MANUFACTURERS:

HAWKSLEY, WILD, and CO., Engineers and Boiler Makers,
SAVILLE STREET EAST, SHEFFIELD.

PATENT SELF-LUBRICATIVE STEAM & HYDRAULIC ENGINE PACKING.



This Packing is invaluable to all Users of Steam-Power; it supersedes anything of the kind ever invented; it
is now in use in all the Chief Railways and First Firms in this Country and Abroad, and is

THE ONLY PACKING THAT WORKS WITHOUT OIL OR GREASE,

Does not char, is pliable, keeps the rods

COOL, BRIGHT, AND CLEAN,

And lasts longer than any other, thereby

SAVING FULLY 200 PER CENT.

To the User, in oil, labour, and material.

Can be had only from the Agents throughout the country, appointed by

THE SOLE LICENSEES,

HENRY HOUSE AND CO.,
CATHERINE STREET, CITY ROAD, LONDON, E.C.

Where also may be obtained, the LUBRICATIVE PACKING COMPANY'S

ANTI-FRICTION CREAM OIL,

Which Lubricates perfectly, keeps the Bearings Cool, and does not become Viscid or Glutinous.

CHAS. PRICE AND CO.'S RANGOON ENGINE OIL, AS SUPPLIED TO H.M. DOCKYARDS AND FLEET.



THIS OIL is suitable to every kind of Machinery. As a lubricant it is equal to the best Sperm
Lard Oil, while it possesses the great advantage of being entirely free from any principle which will
corrode the metal bearings.

For particular kinds of Machinery, the Oil may be specially prepared of a consistency and character
adapted to the nature of the work to be done.

"I herewith certify that the Rangoon Engine Oil, manufactured by Messrs. Chas. Price and Co., is
free from any material which can produce corrosion of the metal work of machinery. It is indeed
calculated to protect metallic surfaces from oxidation.

"The lubricating power of this oil is equal to Sperm or Lard Oil.

Every parcel of the Oil sent from the work bears the Trade Mark of the Firm.

LONDON: CASTLE BAYNARD, UPPER THAMES STREET.
WORKS: MILLWALL, POPLAR; and ERITH, KENT.

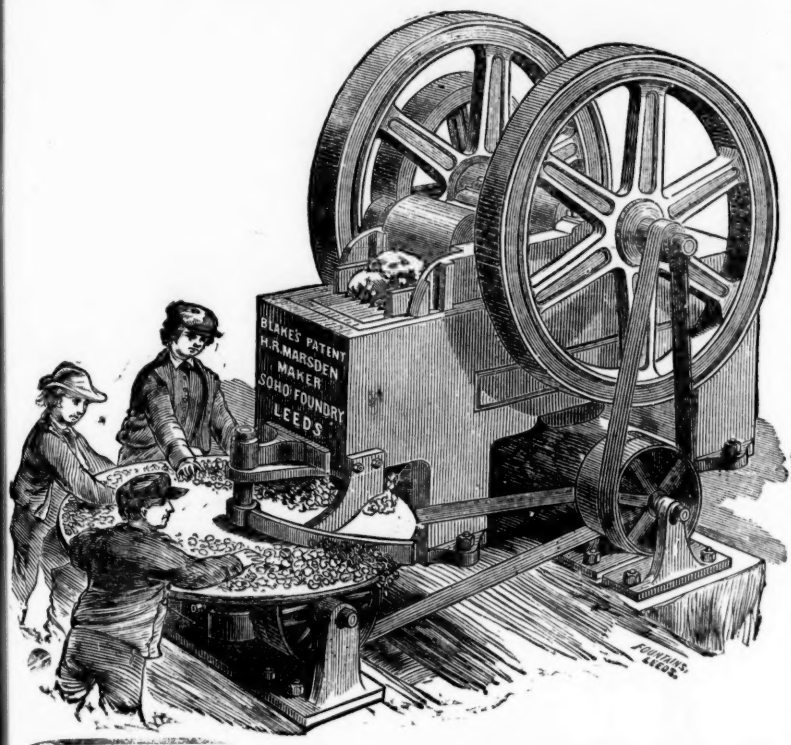
AWARDED TWENTY GOLD AND SILVER FIRST-CLASS PRIZE MEDALS.

IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER, OR ORE-CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

This is the only machine that has proved a success. This machine was shown in full operation at the Royal Agricultural Society's Show at Manchester, and at the Highland Agricultural Society's Show at Edinburgh, where it broke 1 1/2 tons of the hardest trap or winstone in eight minutes, and was AWARDED TWO FIRST-CLASS SILVER MEDALS. It has also just received SPECIAL GOLD MEDAL at Santiago, Chili. It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Bra and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last 12 months, and Capt. Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.

For the Parys Mining Company,
H. R. Marsden, Esq. JAMES WILLIAMS.

Eaton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaws about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.

THOS. GOLDSWORTHY & SONS,
H. R. Marsden, Esq.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent.

WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz.

WM. DANIEL.
Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust.

MESSRS. ORD AND MADDISON,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.

JOHN LANCASTER.
Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour.

WM. G. ROBERTS.
General Fremont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate.

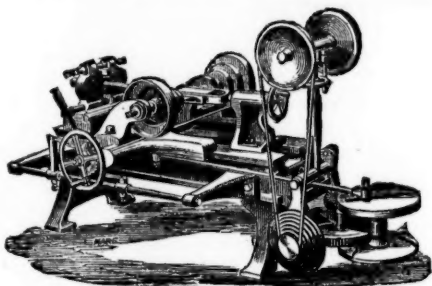
SILAS WILLIAMS.
Your stone breaker gives us great satisfaction. We have broken 101 tons of Spanish pyrites with it in seven hours.

EDWARD AARON.
H. R. Marsden, Esq. Weston, near Runcorn

For illustrated catalogue, circulars, and testimonials, apply to—

H. R. MARSDEN, SOHO FOUNDRY,
MEADOW LANE, LEEDS,
ONLY MAKER IN THE UNITED KINGDOM.

Patent Duplex Cotter-Hole and Key-Bed DRILLING MACHINE.

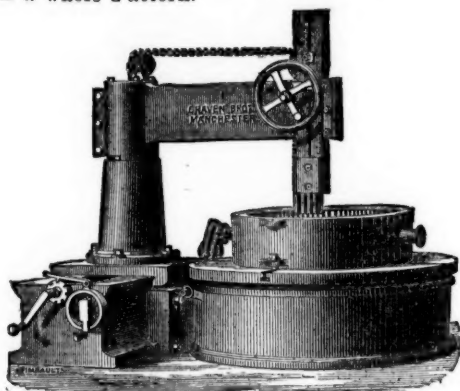


The advantage of this Machine is, that the Drills are only requisite to be half the length of the Cotter-hole required to be cut, as they operate simultaneously from both sides of the object, meeting accurately in the middle, and doing the work in less than half the usual time, besides producing a smooth hole on account of short, stiff Drills being used, thus producing a much better class of work, hitherto unattainable by the Machines with one long Drill.

The Machine is made in three sizes, and often made with double set of Head Stocks, to drill both ends of a connecting rod at the same time.

Improved WHEEL-MOULDING MACHINE.

This Machine will Mould the Teeth of Bevel, Spur, and Worm Wheels, also Straight Racks, of any Pitch with a whole Pattern.



Some of the many advantages in the use of this Machine are, that the Teeth of Wheels are perfectly straight across the Tooth, no tape being required to draw the pattern; the Wheels are true in diameter not depending upon a wood model, which sometimes alters in shape; Wheels of any pitch and form of teeth can be moulded without the use of a whole expensive pattern; and wheels to work into each other can be made mathematically correct in form, at the small cost of segment patterns.

The Machine is made in various sizes to mould wheels of any diameter.

CRAVEN BROTHERS,
MAKERS OF EVERY DESCRIPTION OF MACHINE TOOLS,
Vauxhall Ironworks, Osborne Street, Manchester.

TO PROPRIETORS OF MINES, COLLIERIES, AND IRONWORKS.

A SAVING OF AT LEAST £20 A TON

MAY BE EFFECTED BY ADOPTING

THE DON LUBRICATING OIL.

It has been in use now for nearly three years by the WIGAN COAL AND IRON COMPANY, whose Manager, Mr. ALFRED BEWLETT, says—"I have used the Don Oil for nearly two years, and FIND IT TO ANSWER exceedingly well for the purposes of lubrication."

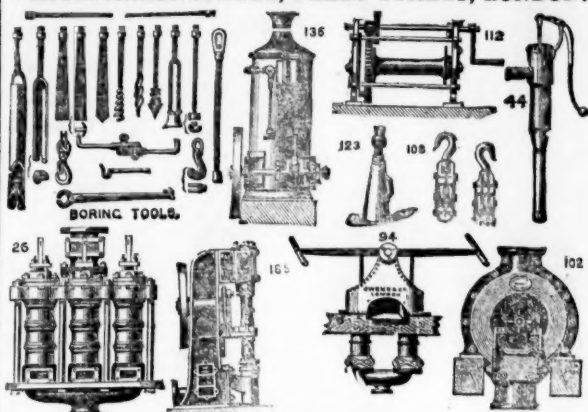
We have also most flattering written opinions, which could be produced, from Mr. THOMAS EMMERSON FORSTER, M.E., of Newcastle-upon-Tyne; from Mr. HARTOP, of Elsecar; from Messrs. VICKERS, SONS, and Co., of Sheffield; and from numbers of others. In face of such indisputable testimony, it is simply a WASTE OF MONEY to use the common kinds, which are nearly DOUBLE THE PRICE. Trials may be made AT OUR EXPENSE: particulars forwarded on application.

AGENTS WANTED, or special arrangements might be made with parties introducing it to their friends.
DUNCAN BROTHERS, Sole Importers,
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S. OWENS AND CO.

Hydraulic and General Engineers,

WHITEFRIARS STREET, FLEET STREET, LONDON.



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BORING TOOLS, for testing ground for Minerals, Bridge Foundations, Artesian Wells, &c., to any depth.

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FOR

GREAT ECONOMY

AND

CLEAR WIDE SPACE.

For particulars, estimates, and plans, address,—

M'TEAR & CO.,

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STREET, LONDON;

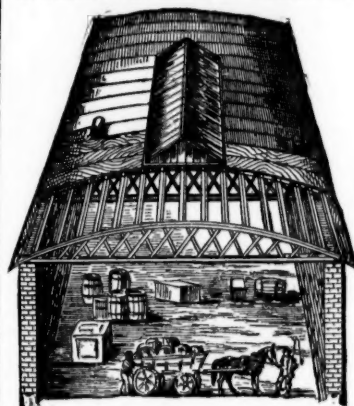
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MANCHESTER;

OR,

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BELFAST.



The above drawing shows the construction of this cheap and handsome roof now much used for covering factories, stores, sheds, farm buildings, &c., the principals of which are double bow and string girders of best pine timber, sheeted with 1/2 in. boards, supported on the girders by purlins running longitudinally, the whole being covered with patent waterproof roofing felt. These roofs so combine lightness with strength that they can be constructed up to 100 ft. span without centre supports, thus not only affording a clear wide space, but effecting a great saving both in the cost of roof and uprights.

They can be made with or without top-lights, ventilators, &c. Felt roofs of any description executed in accordance with plans. Prices for plain roofs from 3s. to 6s. per square, according to span, size, and situation.

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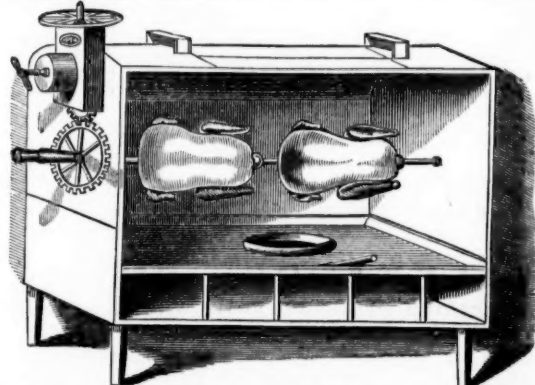
INODOROUS FELT for lining damp walls and under floor cloths.

DRY HAIR FELT, for deadening sound and for covering steam pipes, thereby saving 25 per cent. in fuel by preventing the radiation of heat.

PATENT ASPHALTE ROOFING FELT, price 1d. per square foot.

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MANUFACTURED BY

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Combines NEATNESS and COMPACTNESS with UTILITY and ECONOMY. Meat cooked in this way is superior in flavour and more digestible than in the ordinary mode of cooking—retaining its moisture, as to a large extent it drips itself.

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IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867;

AND OF THE

PHENIX SILVER-LEAD AND BLENDE MINING COMPANY (LIMITED).

THE CREDITORS OF THE ABOVE-NAMED COMPANY are REQUIRED, on or before the 14th day of October, 1871, to send their NAMES AND ADDRESSES, and the particulars of their DEBTS or CLAIMS, and the NAMES AND ADDRESSES of their Solicitors, if any, to FREDERICK FOSTER, of No. 15, Coleman-street, in the City of London, Accountant, the Official Liquidator of the said company, and, if so required by notice in writing from the said Official Liquidator, are, by their solicitors, TO COME IN and PROVE their said DEBTS or CLAIMS at the Chambers of the Master of the Rolls, in the Rolls-yard, Chancery-lane, in the County of Middlesex, as such time as shall be specified in such notice; or, in default thereof, they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such debts are proved.

Tuesday, the 31st of October, 1871, at Eleven o'clock in the forenoon, at the said Chambers, is appointed for hearing and adjudicating upon the debts and claims.

HENRY CHURCH, Chief Clerk of the Vice-Chancellor.
SIR JOHN WICKENS, acting for the Master of the Rolls.
ASHURST, MORRIS, AND CO., 6, Old Jewry, London, E.C.
(Solicitors to Official Liquidator.)

Dated this 15th day of August, 1871.

NEW GWYNFYNYDD GOLD MINING COMPANY (LIMITED).

APPLICATIONS for the REMAINING DEBENTURE BONDS of £10 each, and bearing 10 per cent. interest, being a first charge on the property of the company, will be RECEIVED at the offices of the company, 71, Lord-street, Liverpool, on or before SATURDAY, the 9th September next.

CHARLES BESWICK, Secretary.

HITCHENS AND CO., MINERAL AGENTS AND SURVEYORS, NEW POULTRY CHAMBERS, LONDON, E.C. REQUIRE A RESPECTABLE YOUNG MAN for OFFICE DUTIES, who is able to make Plans and Sections. He must be a good penman, and well up in figures. Apply, in own handwriting, as above, stating salary required.

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BICKFORD, SMITH AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—EVERY COIL OF FUSE MANUFACTURED BY THEM HAS TWO SEPARATE THREADS PASSING THROUGH THE COLUMN OF GUNPOWDER, and BICKFORD, SMITH AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.

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Shares.	Company.	Paid.	Price.
£100	John Abbot and Co. [L.]	75 0 0	22½ 20 dis.
100	Ashbury Co. [L.]	90 0 0	40 37½ dis.
100	Blacknave Iron and Steel Co. [L.]	7 10 0	7 7½ pm.
100	Bolekov, Vaughan, and Co. [L.]	80 0 0	51½ 32½ pm.
100	Brown, John, and Co. [L.]	70 0 0	7 7½ pm.
100	Consett Iron Co. [L.]	7 10 0	4½ 6 pm.
100	Cannell and Co. [L.]	80 0 0	11 10 dis.
52	Edwin Vale Co. [L.]	27 10 0	5 5½ dis.
6	Fairbairn Engineering	20 0 0	1½ 2 pm.
20	General Mining Association [L.]	20 0 0	8 10 dis.
15	Hopkins, Gilkes, and Co. [L.]	10 0 0	½ dis.
10	Ironmasters' Company [L.]	10 0 0	—
10	Midland Iron Co. [L.]	5 0 0	7 9 pm.
9½	Mersey Steel and Iron Co. [L.]	11 10 0	7½ 7½ dis.
4	Mwyndy Iron Ore [L.]	5 10 0	2½ 2 dis.
100	Nantyllo and Blaenau (prop. S. C. pref.)	25 0 0	½ dis. ¼ pm.
1	Nerudha Coal and Iron	0 7 0	par. ½ pm.
35	Palmer's Shipbuilding and Iron Co. [L.]	25 0 0	1 2 pm.
35	ditto	25 0 0	1 2 pm.
100	Partridge Iron Co. [L.]	65 0 0	½ pm. par.
20	Patent Shaft and Axletree Co. [L.]	10 0 0	7 7½ pm.
50	Rhydyron Iron Co. [L.]	50 0 0	17 15 dis.
15	ditto New	15 0 0	5½ 4½ dis.
50	Shotts Iron Co. [L.]	50 0 0	20 19 dis.
100	Sheepfold Iron and Coal Co. [L.]	60 0 0	7 6 dis.
100	Staveley Iron and Coal Co.	60 0 0	60 55 pm.
100	ditto	10 0 0	8 9 pm.
100	Thames Iron Company	10 0 0	9 11 pm.
7½	Titanic Iron and Steel	5 0 0	—
100	Vancouver Coal [L.]	6 0 0	par. 1 pm.
10	Van Iron Ore [L.]	10 0 0	—
10	Whitcliffe Iron Mines [L.]	4 0 0	—
100	Wigan Coal and Iron Co.	100 0 0	12 10 dis.
75	ditto	75 0 0	12 10 dis.

THE MINING SHARE LIST

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1000	Alderley Edge, Cheshire	10 0 0	—	—	10 11 8	0 5 0	July 1871
2000	Blaken Caelan, Cheshire	1 0 0	1½	1½ 1½	0 1 0	0 1 0	May 1871
6000	Bracewell, Cheshire	1 0 0	—	—	0 2 0	0 2 0	Apr. 1871
200	Botallack, St. Just	91 5 0	240	240 260	601 5 0	0 0 0	Aug. 1871
50000	Brondyod, s-l, Cardigan	100 0 0	105	105 110	106 0 0	0 0 0	July 1871
4000	Brookwood, Cheshire	1 16 0	—	—	1 0 0	0 2 6	July 1871
5004	Bwlch Consols, s-l, Cardigan	4 0 0	—	—	0 9 0	0 2 0	May 1871
6400	Cashwell, Cheshire	2 10 0	—	—	0 14 6	0 2 0	Dec. 1870
5000	Castle-an-Dinas, St. Columb.	2 0 0	—	—	0 2 0	0 2 0	July 1871
858	Cargill, s-l, Newlyn	16 5 7	—	—	16 15 0	0 10 0	Aug. 1869
1000	Carn Brea, s-l, Illogan	35 0 0	155	130 135	282 10 0	2 0 0	Aug. 1871
2450	Cook's Kitchen, Cheshire	19 14 9	—	27 28	6 17 0	0 15 0	July 1871
862	Cwm Erlyn, Cheshire	12 10 0	—	—	31 18 0	0 5 0	Mar. 1871
128	Cwm-y-tyr, Cheshire	60 0 0	—	—	384 10 0	0 0 0	July 1869
280	Dewent Mines, s-l, Durham	800 0 0	—	—	177 0 0	2 10 0	July 1868
1024	Devon Gt. Consols, Cheshire	1 0 0	100	95 105	1153 0 0	4 0 0	May 1871
656	Ding Dong, Cheshire	49 14 6	—	—	7 10 0	0 15 0	Aug. 1870
1432	Dolcoath, Cheshire	32 4 6	185	177½ 182½	260 12 6	3 10 0	Aug. 1871
12800	Drake Wallis, Cheshire	2 10 0	—	—	1 3 0	0 1 0	July 1871
6144	East Caradon, St. Cleer	2 14 6	—	—	14 14 0	0 2 6	July 1871
300	East Darren, Cheshire	32 0 0	—	—	197 10 0	2 0 0	Apr. 1871
6400	East Pool, Cheshire	0 9 9	13½	13 13½	11 16 8	0 5 0	July 1871
1006	East Pool, Cheshire	0 9 9	13½	13 14	11 16 8	0 5 0	July 1871
5000	Foxdale, Cheshire	22 0 0	—	—	75 10 0	0 10 0	July 1871
3000	Ganton, Cheshire	3 18 6	—	—	4 8 0	0 2 6	Aug. 1870
3500	Ganton, Cheshire	3 18 6	—	—	4 8 0	0 2 6	Aug. 1870
15000	Great Laxey, Isle of Man	4 0 0	18	16 17	14 3 0	0 6 0	June 1871
3000	Great Northern Manganese	5 0 0	—	—	—	—	Feb. 1869
5908	Great Wheel Vor, Cheshire	40 0 0	9½	9½ 10	15 12 0	0 3 6	June 1870
10240	Gunnislake (Chiters), Cheshire	4 19 0	—	—	0 2 0	0 1 0	Nov. 1870
1024	Herodfoot, near Liskeard	8 10 0	45	40 42½	87 0 0	1 10 0	July 1871
25000	Killaloe, Tipperary	1 0 0	1½	1	0 2 1½	0 0 9½	Dec. 1870
165	Levant, Cheshire	10 8 1	—	—	0 17 0	0 2 0	Aug. 1869
562	Lisburne, Cheshire	15 10 0	—	—	343 10 0	0 5 0	Mar. 1871
9000	Lisburne, Cheshire	4 10 6	6	5½ 5½	7 2 0	0 4 0	July 1871
1800	Minora Mining Co., Wrexham	25 0 0	—	—	293 18 3	4 15 0	Aug. 1871
20000	Mining Co. of Ireland, Cheshire	7 0 0	6½	6½ 6½	0 4 6½	0 2 1	July 1870
6400	New Pembroke, Cheshire	5 0 0	—	—	0 7 6	0 2 6	Mar. 1871
2000	North Levant, Cheshire	10 12 0	—	14 15	3 5 0	0 15 0	Aug. 1871
5610	North Wheel Croft, Cheshire	3 11 3	2	2 2½	0 5 6	0 1 6	June 1871
256	Pendarves United, Cheshire	86 0 0	52½	50 52½	21 0 0	0 3 0	July 1871
5000	Penhalls, St. Agnes	3 0 0	6	5 6	1 19 6	0 3 0	Aug. 1871
5000	Phenix, Cheshire	50 0 0	—	—	470 10 0	7 0 0	June 1871
1772	Pobberly, Cheshire	15 0 0	—	—	0 17 0	0 1 0	May 1871
2000	Poldice, Cheshire	10 0 0	—	—	1 10 0	0 10 0	June 1870
12800	Prince of Wales, Cheshire	0 12 6	7½	7½ 7½	0 10 6	0 1 0	Nov. 1869
1120	Provident, Cheshire	10 6 7	27	25 27	102 2 6	0 10 0	June 1871
15000	Queen, Cheshire	0 10 0	—	—	0 2 0	0 1 0	Dec. 1870
5869	Rosewall Hill & Ransom, Cheshire	4 0 0	1	¾ 1	0 14 6	0 1 6	June 1871
512	South Caradon, St. Cleer	1 5 0	220	200 220	668 10 0	3 0 0	July 1871
6123	South Conduff, Cheshire	5 5 6	9½	9½ 9½	0 7 6	0 2 6	June 1871
6000	South Darren, Cheshire	3 6 6	—	—	1 1 6	0 1 6	Nov. 1870
937	South Wh. Croft, Cheshire	24 10 10	22	20 21	3 0 0	0 10 0	June 1870
496	St. Wh. Frances, Cheshire	18 10 0	—	—	32 12 6	1 0 0	Mar. 1871
242	Spearn Moor, Cheshire	26 17 9	20	—	16 15 0	0 10 0	June 1871
540	St. Ives Consols, Cheshire	10 15 0	7½	6½ 7½	0 10 0	0 10 0	Mar. 1869
6771	St. Just Amalgamated, Cheshire	3 10 0	—	—	0 5 0	0 2 6	Nov. 1870
12000	Tankerville, Cheshire	6 0 0	18	16½ 17½	1 6 0	0 6 0	Aug. 1871
6000	Tinctor, Cheshire	9 0 0	50	49 50	30 18 6	1 15 0	May 1871
4000	Trumpet Cons., Cheshire	5 15 0	17	16 17	7 10 0	0 10 0	June 1871
15000	Van, Cheshire	4 5 0	56	55 57	4 14 0	0 12 0	June 1871
3000	W. Chiverton, Cheshire	10 0 0	21	20 21	50 7 6	1 0 0	June 1871
512	West Wheel Frances, Cheshire	106 15 0	—	—	6 10 0	1 0 0	Apr. 1871
400	W. Wheel Saxon, Cheshire	47 0 0	140	130 135	679 0 0	2 10 0	Aug. 1871
12288	Wheel Bassett, Cheshire	1 2 6	60	60 65	632 10 0	0 1 0	June 1868
612	Wheel Jane, Cheshire	10 15 0	42½	40 42	33 10 0	1 10 0	Nov. 1870
4295	Wheel Kitty, Cheshire	5 4 6	9½	9½ 9½	6 18 0	0 10 0	Aug. 1871
1024	Wheel Kitty, Cheshire	3 10 6	9½	7½ 9½	13 12 6	0 5 0	Apr. 1871
896	Wheel Margaret, Cheshire	13 17 6	18	16 17	80 7 6	0 12 6	Aug. 1871
1024	Wheel Mary Ann, Cheshire	8 0 0	8	8 9	72 17 6	0 10 0	June 1871
1000	W. Mary Hutchins, Cheshire	2 12 6	—	—	0 10 0	0 5 0	Aug. 1869
80	Wheel Ows, Cheshire	70 0 0	—	—	490 0 0	8 0 0	Aug. 1871
12000	Wheel Russell, Cheshire	1 0 0	—	—	0 2 0	0 1 0	June 1871
896	Wheel Saxon, Cheshire	61 0 0	52½	52½ 52½	254 12 0	0 2 0	Feb. 1869
4000	Wheel Ury, Cheshire	10 14 6	8	8 8½	0 11 0	0 6 0	July 1871
71000	Wicklow, Cheshire	2 10 0	6½	6 6½	50 2 6	0 2 6	Sept. 1870

FOREIGN DIVIDEND MINES.

35000	Almaden, Spain	2 0 0	2½	1½ 2½	0 15 6	0 2 6	Mar. 1871
130000	Almaden & Tinto Consolidated, Spain	1 0 0	1¼	1¼ 1¼	0 2 3	0 9 0	June 1871
30000	Australian, Cheshire	7 6 6	—	—	0 1 6	0 0 0	Aug. 1868
16000	Cape Copper Mining Co., Cheshire	10 0 0	17½	14½ 15½	0 1 6	0 10 0	Apr. 1871
10000	Central American Association	0 15 0	—	—	0 0 0	0 1 0	July 1869
21000	Colorado Terrible, Cheshire	5 0 0	6½	6 6½	0 6 0	0 1 6	June 1871
10000	Copiapu Mining Co., Chile	16 10 0	2½	1½ 2½	0 4 0	0 4 0	Apr. 1869
76162	Don Pedro North del Rey, Chile	0 14 0	3½	2¾ 3½	2 3 0	0 4 0	Mar. 1870
22500	Eberhardt & Aurora, Nevada	10 0 0	32	29 40	1 0 0	1 0 0	July 1871
70000	English and Australian, Cheshire	2 10 0	—	—	1 19 0	0 9 0	Aug. 1869
25000	Fortuna, Cheshire	2 0 0	3¼	2¾ 3¼	2 5 4	0 2 6	Mar. 1869
10000	Goussac, Cheshire	5 0 0	—	—	10 per cent.	—	Aug. 1868
65000	Kapunda Mining Co., Australia	1 0 0	¼	¼ ¼	0 10 0	0 6 0	Nov. 1868
15000	Linares, Cheshire	1 0 0	4½	3¾ 4½	12 18 0	0 5 0	Mar. 1871
50000	Panama, Cheshire	4 0 0	2½	2 2½	per cent.	—	Yearly.
10000	Pontatiguet, S. France	20 0 0	15	14 16	9 8 9	0 11 0	July 1871
100000	Port Phillip, Cheshire	1 0 0	1	¾ 1	1 7 0	0 1 0	June 1871
120000	Scottish Australian Min. Co., Cheshire	1 0 0	¾	¾ ¾	6 per cent.	—	Apr. 1871
12500	Sierra Nevada, Cheshire	2 0 0	5¼	4¾ 5¾	2 0 0	2 0 0	June 1871
10000	Sierra Nevada, Cheshire	5 0 0	4	3¾ 4½	0 12 0	0 5 0	Nov. 1868
11000	St. John del Rey, Brazil	15 0 0	31½	31 32	81 10 0	4 5 0	Dec. 1867
15000	Sweetland Creek, Cheshire	4 0 0	4½	3¾ 4½	1 0 0	0 4 0	Aug. 1871
50000	Victoria (London) [25000 £1 pd.]	25000	168. pd.]	—	0 9 7	0 0 7	July 1869